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FROM CRISIS TO RECOVERY IN ASIA: STRATEGIES, ACHIEVEMENTS, AND LESSONS

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From Crisis to Recovery in Asia: Strategies, Achievements, and Lessons

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Abstract

This paper reviews and highlights lessons from the stabilisation and reform programme that Thailand, Malaysia and Korea implemented in response to the 1997 crisis. The three countries' rapid recovery from a deep economic downturn in 1998 and their reduced vulnerability to balance of payments crisis are clearly evident. During the past ten years, these countries have not only witnessed a severe turmoil in the domestic financial sector and the exchange rates, but also significant stabilisation and recovery from the crisis. We clearly see that the policies adopted by the governments have been successful as instruments for the recovery from the crisis. Eventually, we hope that what we have learned from this crisis will help us avoid repeating the same mistakes. Further perpetuation of the crisis prevention measures is required to ensure continued economic growth and to reduce the risks of future crises recurring.

Preliminary Draft

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Introduction

It is widely recognised that 1997 was an important year in the history of Asia. The turmoil that rocked Asia's currencies in 1997 was the world's third major currency crisis of the 1990s. Its forerunners were the crisis in the European Monetary System in 1992-93 and the Mexican peso crisis in 1994-95. Even so, the Asian financial crisis can be traced to a set of interrelated problems. Thus there is not a single rescue package to resolve it.

Interestingly, while the issues have changed in the intervening ten years, yet Asia remains no less central to the world economy now than it was then. Currently we welcome 2007 with a look back to 1997, particularly focusing on how much things have changed since 1997. The objective of this paper is to review and draw lessons from the stabilisation and reform programmes that Thailand, Malaysia, and Korea have implemented in response to the 1997 crisis. Having rebounded from the 1997 crisis, we find that in most cases, crisis-hit countries have taken a 180-degree turn over the past decade. We have experienced current account surpluses replacing deficits, international foreign reserves on the rise, currencies under pressure to appreciate instead of depreciate, and foreign capital continuing to flow in rather than fluxing out.

These are impressive achievements, and the countries have been successful in restoring confidence and stabilising financial markets, laying the foundations for a sustained recovery in the real economy, and attempting at lowering the chances of future crises recurring. Moreover, we believe that the reforms and financial sector restructurings initiated since the crisis will continue to yield benefits in the years to come.

Notwithstanding these achievements, in response to the lessons from the financial crisis, the crisis-hit countries are resolute in taking steps in unison towards greater regional financial cooperation and integration. Needless to say, the prospects for dynamic and balanced economic growth are bright. The new regional co-operations to support region-wide financial stability will provide strong built-in mechanisms to prevent excessive macroeconomic imbalances and enhance the macroeconomic risk management capability in the region. At the regional level, several multilateral architectural designs, such as the regional surveillance mechanisms and the Chiang Mai Initiative (CMI), are already in place as safeguards against any downside risk. Presently, numerous forms of such initiatives and co-operations continue to remain on track.

This year marks the tenth anniversary of the "Asian Financial Crisis". The crisis-hit countries hence are entering an exciting new era of strong economic growth with stability. Therefore, the transformation of the economies during the past ten years and their increasing potential in the years to come are worthy of careful study.

Accordingly, this paper is structured as follows. Section 2 reviews the origins of the financial crisis and provides a brief summary of the events leading up to the outbreak of the crisis. Section 3 emphasises the strategy followed in response to the crisis, its rationale, and the achievements. In Section 4, we review the factors that have contributed to the countries' economic recovery. We also discuss the challenges ahead to outline the kinds of corrective policy measures that would help end a crisis and reduce the chances of a recurrence in Section 5. Finally, Section 6 provides a conclusion.

From Boom to Bust

Causes of the Crisis

As GDP growth rate that averaged 4% between 1967 and 1985 surpassed 10% in 1988, Thailand was widely hailed as Asia's next 'tiger' and 'a … signpost to the … predicted Asian century' (Spaeth, 1997). This view is also supported by World Bank (1993). One decade later, the country once praised for its economic miracle again made international news headlines. A May 1997 cover of *The Economist* magazine read 'The fall of Thailand' and signs of weaknesses in the economy became increasingly evident. But few anticipated a financial meltdown, believing in Thailand's strong fundamentals. In reality, impressive growth figures may conceal weaknesses and the crisis was triggered when policy failed to act properly to changes of the external environment.

The 2 July 1997 devaluation of the Thai baht unofficially marked the turning point. Its value plummeted, so did GDP growth rate that bottomed at -10% in 1998. Thailand's crisis infected neighbouring economies and prompted the largest bail-out in history. But how did these rising Asian stars take a tumble from tigerhood?

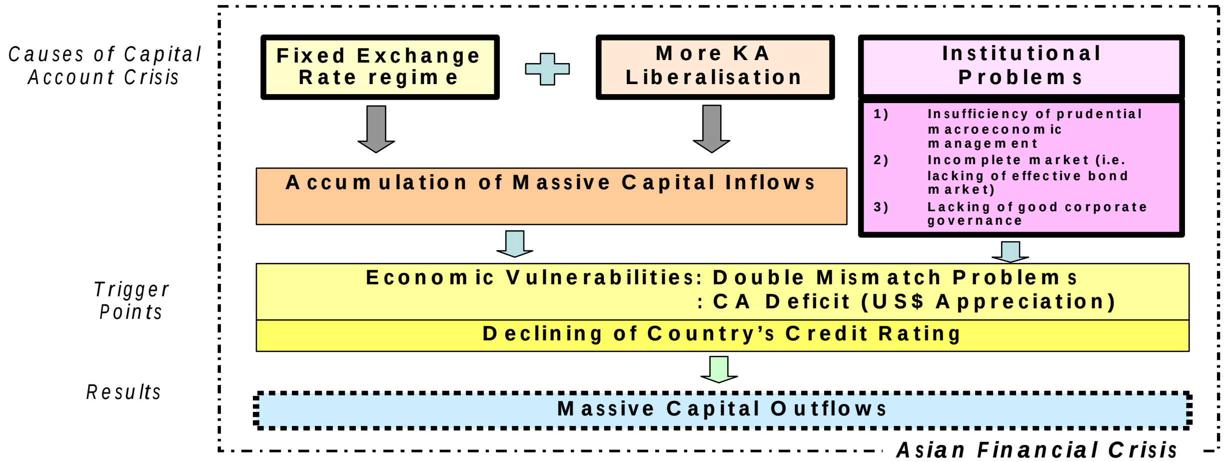
Revisiting the region ten years later, this section investigates the already-abundant literature on the causes of the Asian financial crisis. One conventional explanation, weak macro-economic fundamentals that produce current account (CA) deficit, barely fits the Asian scenario. The CA deficit in the pre-crisis years almost never exceeded 5%, and the deficit was not caused by conventional government deficits. In fact, the high growth generated budget surplus for many years before the crisis. Moreover, the fixed exchange rate regime led to domestic currency over-valuation over time, thus squeezing competitiveness and export earning, this external imbalance cannot fully explain the extent of this regional crisis.

The crisis was rather a self-fulfilling capital account (KA) or balance-of-payment crisis, exemplified by massive capital inflows accumulated for years and sudden massive outflows in a short period of time. Thailand opened for more capital liberalisation via BIBF scheme in the early 1990s. The out-in facility became a new channel for gaining low interest rate funds from abroad. The degree of capital inflow accumulation was escalated by the sub-optimal monetary policy – the defence of pegged domestic currency and high interest rate policy. They caused the *ex-ante* low currency risk for investors and a higher return relative to the low return in the international markets due to the global economic slowdown. Particularly in the latter year before the crisis, the 'hot money' was poured in at an extraordinary rate to enjoy the higher interest rate differentials and expected gain from baht depreciation. The situation was exacerbated by short-term borrowing from abroad, primarily to finance long-term projects, hence currency and maturity mismatches induced the so-called 'balance-sheet crisis' when capital flowed out. The building up of international reserves and the promise to keep baht stable seemed to be the standard explanation comforting the businesses that the bubble can continue. In the cases of Thailand, Korea and Indonesia, the foreign short-term liabilities had exceeded international reserves by 1996. Once the baht were floated, foreign debt in local currency skyrocketed and investor's sentiments led by lowering credit rating, were adversely affected. Unguarded by any capital control measures, the financially panicking investors pulled out their funds from Thailand and across the region. The contagious effect began and the crisis becomes a regional phenomena.

The above arguments may well rationalise the *incidence* of the Asian recession but perhaps not its *intensity*. Contagion, it can be argued, is fuelled by the crisis' third element: institutional. 'Good governance' or 'prudential norm' which was relatively new vocabulary in Asia at that time became a buzz word for financial development. Countries in Asia try to distinguish themselves from others by promoting transparency, freeing from conflict of interest, reducing moral hazard and creating symmetric information.

In summary, the crisis presents a combination of three inappropriate policies: 1) sustaining fixed exchange rate when it is no longer suitable, 2) allowing too much short-term capital flows to accumulate with high degree of currency speculation and 3) lacking of sufficient risk management system at the national level as well as regional level. In short, the Asian financial crisis in the 1997 is best described as a classic capital account crisis, coupled with the lack of institutions established to monitor, to prevent and to alleviate the crisis.

Figure 1: **Nature of Asian Capital Account Crisis**



Source: FPRI (2007)

Fixed Exchange Rate and Massive Capital Inflows

As early as 1995, Credit Lyonnais warned that Thailand resembled pre-peso crisis in Mexico (Akrasanee, 1999) where risks associated with over-valued currency had been downplayed. To minimise these, the 'two-corner solution' was offered: only free floating or currency board systems could be sustained in the long run. The World Bank agreed and in the same year recommended Asian countries including Thailand to relax its rigid or quasi-pegged exchange rate regime.

Prior to the crisis, strong macroeconomic performance and the relative stability of the exchange rate naturally led both borrowers and lenders to underestimate the risk of their foreign currency exposure. The large unhedged foreign debt and its short maturity left the countries vulnerable to capital flight and a sharp devaluation.

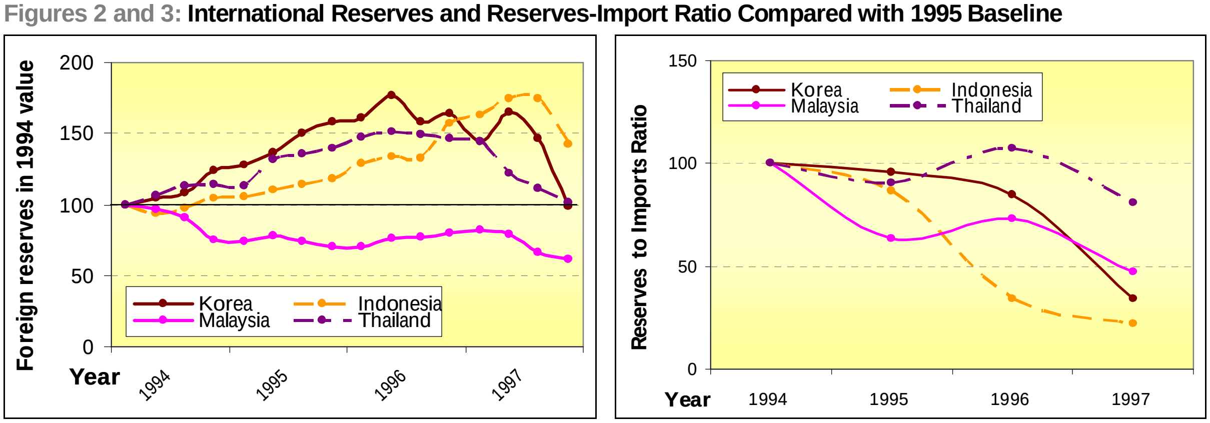
The rapid build-up in private short-term capital inflows created the potential for ***Double Mismatch problems***. As in many Asian countries, bank financing historically played a leading role in economic development, with relatively undeveloped equity and debt markets. Currency pegging gives confidence to investors but this alone cannot explain Asia's emergence in the world capital market. By the mid 1990s, Asian states including Thailand, Malaysia and Indonesia had open capital account more to attract investment. During the 1990s, the government expanded the scope for overseas short-term borrowing by removing controls on such borrowing, thus dramatically increasing short-term external debt and resulted in creating ***maturity mismatch***. The positive spread between domestic and foreign interest rates combined with the relative stability in the exchange rate also helped to draw large inflows of foreign capital. For example, Thailand financial institutions borrowed short-term overseas in order to help finance long-term investments. Korea was more sceptical but it still allowed Korean banks to borrow heavily from international banks at very short maturities. Coupled with the underdeveloped market for hedging, there was little incentive to hedge against exchange rate risk. ***Results were uniform: because of greater capital account deregulation, high interest rate differential, and the belief that fixed exchange rate regime would be sustained, these Asian nations experienced huge success in accumulating short-term foreign capital in foreign currency (mainly $US) while investing in long-term projects which generated returns in local currency. The maturity mismatch prevailed***

largely in these countries. The average size of capital inflows expanded from 7% of GDP in 1988 to 13% in 1995 (Edwards, 1999). By 1996, the total capital inflows as a percentage of GDP for Indonesia, Malaysia, Philippines and Thailand were 5.1, 10.2, 4.1 and 11.5 respectively (Cavoli and Rajan, 2005). The corresponding numbers as a percentage of international reserves were then 154.5, 60.4, 114.6 and 89.6 for these respective countries.

Part of the capital inflows appeared to be portfolio investment. In Thailand, portfolio capital inflows in 1993, increased by ten times from the 1987 figure (Akrasanee, 1999). Calvo, Leiderman and Reinhart (1995) warn that such massive portfolio inflows create problems for policy-makers; they may not be 'intermediated efficiently' and sudden reversal may turn the country's economic fortunes upside down overnight. Because reckless portfolio investment can easily be pulled out, such investment contributes little to productivity but creates rapid credit expansion, thereby strengthening the boom-bust business cycle and building up financial vulnerability (McKinnon and Pill, 1996). Although the stock market started to take a downturn after its 1994 peak and the number of Bangkok's unoccupied houses increased to twice of annual demand, no one anticipated the emergence of a deep financial distress.

However, in the case of Thailand, the large part of capital inflows came in the form of commercial bank borrowing. Due to underdeveloped swap market, inadequate internal risk evaluation and government guarantee for banks against their failures, the foreign debts made by the Banks and private businesses were mostly unhedged (Sangsubhan 1999). The total external indebtedness surpassed 50% of GDP even prior to the baht floatation (Rudolph, 2000), and the short-term bank loans exceeded twice the volume of gross international reserves by the end of 1996. In Indonesia and Malaysia, these loans were as high as 140% and 160% of their international reserves respectively, compared with only 20% in virtually crisis-unaffected Taiwan (Yoshitomi and Shirai, 2000). Moreover, a large proportion of these were non-performing loans (NPLs): 10% and 13% of total lending in Malaysia and Thailand respectively which is incredibly high when Hong Kong and Singapore's figures were at 3-4% level (Edwards, 1999).

Figures 2 and 3: **International Reserves and Reserves-Import Ratio Compared with 1995 Baseline**



Source: FPRI (2007)

The abovementioned sub-section focuses on exchange rate management, an issue raises here regarding 'when' dilemma of KA liberalisation. In Edwards (1999), developing nations should open KA only after key objectives of reforms such as fiscal stabilisation, trade reform and the implementation of modern supervision had been attained. He added, 'some form of impediments to capital mobility [might] be retained until … the domestic banking sector is strong enough'. Stiglitz (1999) cannot agree less; 'you want to look for policies that discourage hot money but facilitate the flow of long-term loans'.

Table 1 and 2: **Correlation Coefficients of Crisis-Period Contagion Testing in Foreign Exchange (Left) and Stock (Right) Markets with * Denoting z Statistical Significance at 5% Level**

	KR	ID	MY	TH	TW	SG
Korea	-					
Indonesia	0.05	-				
Malaysia	0.23*	0.26	-			
Thailand	0.25*	0.37*	0.35	-		
Taiwan	0.16	0.16	0.27*	0.21*	-	
Singapore	0.13	0.48	0.47	0.43	0.29*	-

	KR	ID	MY	TH	TW	SG
Korea	-					
Indonesia	0.09	-				
Malaysia	0.10	0.44*	-			
Thailand	0.10	0.40*	0.51*	-		
Taiwan	0.14	0.15*	0.25*	0.28*	-	
Singapore	0.04	0.36*	0.67*	0.44*	0.26*	-

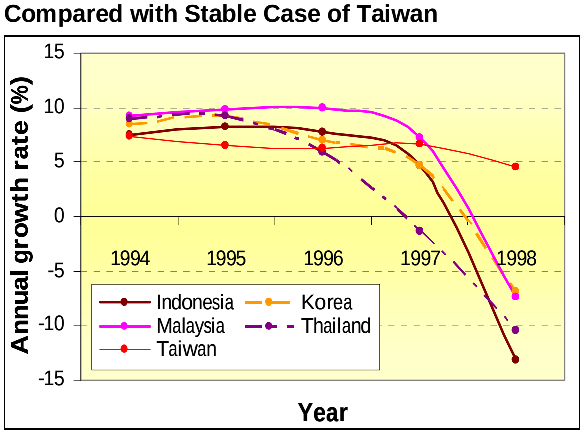
Source: Park and Song (2000)

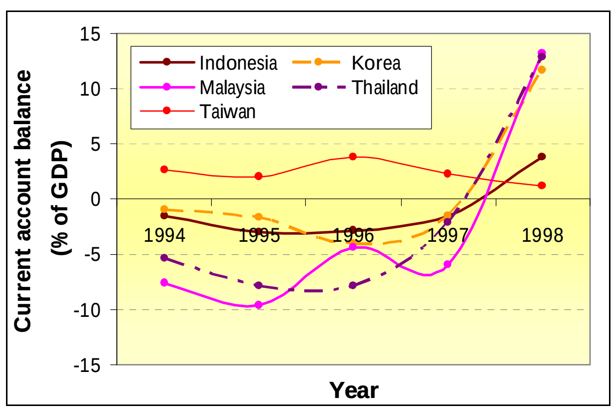
Current Account Deficit and Lower Credit Rating

Before the crisis, the Asia's GDP high growth came with high rate of inflation. In the case of Thailand, the inflation reached 6% in 1996. However under the fixed-to-$US exchange rate system, the bath value could not freely adjust to changes in inflation rate, hence increasing the speculation for baht depreciation. At the end of 2005, the US$ appreciated by approximately 3 percent against the Yen. In comparison to the end of 2004, the strong baht then moved against export competitiveness and caused current account deficit by 8.1%of GDP, the largest in the modern economic history of Thailand. However, at that time opinions were highly diverse. Sachs, Tornell and Velasco (1996) estimate that the ringgit and rupiah were under-valued and the baht appeared in equilibrium whilst Goldman Sachs dynamic model demonstrate that over-valuation was only 'modest'.

In 1996, the dollar continued to appreciate against the yen, so did those currencies pegged to the dollar-dominated basket. Thailand's export earnings that grew 18% per annum in 1980-1989 contracted by 2% in 1996 (SCB Research Institute, 1998). Opinions, at that time, openly criticised the exchange rate policy that in order for exporters to survive, a major devaluation was necessary, and this increased the speculative forces. The Bank of Thailand, however, continued to defend the baht while foreign reserves dramatically shrank (Weerawan, 2004). Yet, after a period of 'denial, … enough bad news pile[d] up to cause the crash' (Dornbusch, 1997). The baht was floated on 2 July 1997 and its value plunged by about 20% in a single day.

Figure 4 and 5: **Volatile Real GDP Growth and Current Account Balance in Four Crisis-Hit Countries Compared with Stable Case of Taiwan**





Source: International Monetary Fund (2007)

Along with massive capital accumulation and increased currency risk, the current account deficit represented the last piece evidence to rating agency to lower the sovereign rate of Thailand. Moody's Investors Service first downgraded Thailand's rating in 1996. The currency speculation was self-fulfilling, and the capital flight began. After currency devaluation and adoption of flexible exchange rate in July 1997, the massive capital outflow led baht fall sharply, foreign liabilities measured in local currencies skyrocketed and disrupted all economic activities, real sector and financial sector alike. The KA crisis situation was aggravated by insufficient and untimely liquidity injection and IMF's current-account-crisis policy prescription of interest rate hikes, and government expenditure cut. Then, the NPLs ballooned as many companies defaulted on loan re-payments and as local banks could not come up with the foreign exchange required to repay their debts. The economy halted and spirally moved downward.

Weaknesses in the financial system: The Institutional Problems

There were three institutional problems – insufficiency of prudential macroeconomic management, incomplete capital market i.e. lacking of effective bond market, and lacking of good governance at the corporate level.

The prudential macroeconomic monitoring and management had been the strong point of countries in Asia including Thailand for long time. However, they were not familiar with the new pattern of the global capital movements. Generally, developing countries see capital inflows as scarce resource and higher foreign reserves as stability. However, if there is anything to be learnt, the crisis provided an experience that excessive capital inflows might not be good if the country cannot manage it well. The core economic agencies should work collectively to reduce the short-term flows while encourage the long-term capital and channel them to the project that can increase productive efficiency of the country. Comments was made by criticised the policy-makers and financial authorities whom supposed to keep a vigilant eye on the financial sector and to 'lean against the wind of lending booms to ensure that bank lending does not grow too rapidly' (Birdsall, Gavin and Baumann, 1997). Asian states lacked the political will and institutional capacity to do so. Unlike KA which can be liberalised overnight, it takes years of 'learning-by-doing' for prudential standards and enforcement tools to be upgraded. Asia, can be said, was unprepared to deal with massive capital flow. Weak unsupervised banks invited contagion and reduced the authority's ability to use interest rate as a macro-economic tool (Edwards, 1999).

On incomplete capital market, the emerging economies in Asia have one thing in common the lack of the long term bond market. If the capital inflows came to invest in the long-term bond denominating in local currency (instead of short-term bank loan denominated in $US), the degree of currency and maturity mismatch would have reduced significantly. This was the result of a long history of bank finance dominating the financial sector. Moreover, in the case of Thailand, the long fiscal surplus before the crisis was in fact reducing the size of the government bond market. Also, without a liquid long-term bond market, the economy in a crisis has limited opportunity to transform short-term debt obligation into long-term bond. Had the issuance of government bond replaced some of the private short-term loan or proper guarantee to the private bond by government as well as by international financial organisation, the degree of severity would be minimised.

An institutional problem of good governance was cited as a key reason that escalates the crisis and creates contagious effects. Krugman (1999) cites that 'bad' banking practice as the major cause of crisis. Moreover, the crisis seems to expose the weaknesses of Asian business practices of business-government patronage ties, corruption, and incomplete information. Little information on the banking system and, in the Thai case, central bank's off-balance sheet positions were made available, thereby generating a form of market failure: asymmetric information. Once crisis erupted, many investors irrationally pulled out of the region because they assumed that fundamentals in Asian emerging markets were all the same. If somehow they had been better informed, the contagion effect that pushed Asian economies into a deep trough would have been maintained (Krugman, 1998).

Moral hazard from government's blanket guarantee for all financial institution posed other institutional problems. The risk of the Asian financial sector thus remained low throughout the pre-crisis years. Investors dismissed the possible bank run scenario for they misunderstood that in any event the government would bail them out. Hence there is no real incentive for close economic monitoring. Cronyism of double standard for easy access to the loan of the well-connected people to authorities was cited a bleach of good governance. The rapidly expanding business empire of Suharto's family which was granted extraordinary favours was a commonly cited example (Rudolph, 2000).

In gauging the extent of governance to the crisis, Rudolph (2000) summarised that '[they] might not trigger off the crash but they were [its] contributory factors', inviting contagion and prolonging the crisis. The economic malaise, though externally induced by capital movement, might have been avoided if internal aspects, namely supervisory institutions and banking practices, had been improved.

The Crisis Management Strategy and Consequences

The objectives of Asia's crisis resolution strategy of each country were, first and foremost, to restore confidence and stabilise financial markets, and second, to lay the foundation for a sustained recovery in the real economy and lower the chances of future crises. The policy strategy was a combination of macroeconomic policy adjustment, financial recovery plan, and structural reforms. To ease the social impacts which inevitably accompany the reforms, the programme also contained a substantial expansion of the social safety net.

Stabilising the Exchange Rate Policy

The monetary policy responses undertaken by crisis hit Asian countries need to be discussed. As the Asian crisis had the nature of a capital account crisis or twin crises, the corrective policy responses should be the provision of sufficient and immediate liquidity. This is because the impact of liquidity squeeze caused by a reversal of capital flows on the real sector should be moderated, a loss of the intermediation capacity of insolvent banks should be complemented and financial and real assets prices should be prevented from collapsing further (Yoshitomi and Shirai, 2000).

In the early stage after the crisis onset, Thailand Korea and Malaysia introduced **Tight monetary policy**, whereby the interest rates were set high during the first half of 1998. The domestic interest rate hike is often used as a measure to restore confidence and to stabilise the exchange rate in the event of current account crisis. It aims to raise speculators' financing costs higher than anticipated gains from short selling activities in a domestic currency. In Korea, real interest rates surged and turned positive from March and July 1998. In Thailand, the real interest rates increased to 13% in the fourth quarter of 1997 and fell to 11% in the second quarter of 1998. Similar experience also evidenced in Malaysia.

However, it seems that a sustained high interest rate policy to stabilise the exchange rate did not successfully work due to the lack of confidence. Such policy instead led to insufficient liquidity, real sector downturn and high NPL rates. Edwards (1999b) argues that the existence of weak banks would reduce the central bank's ability to use the domestic interest rate as a macroeconomic tool and, if used, it is likely to amplify a crisis. Bergsten, Davanne and Jacquet (1999) also view that the central bank should not raise the domestic interest rate in order to stabilise the exchange rate. During the crisis, the default risk premium was highly positively correlated with the level of domestic interest rates. The high interest rates adversely affected the ability of firms to pay back their domestic and foreign loans, which led to many bankruptcies. The bankruptcies of banks and credit contraction generated a credit crunch, thereby aggravating economic recession and further damaging the ability of firms to repay their debts (Furman and Stigliz, 1998 and Radelet and Sachs, 1998). Thus, a high interest rate further depreciated the exchange rate against a government's will.

In addition, the implementation of the BIS capital adequacy requirements during a crisis increased the amount of non-performing assets of poor financial institutions and this exacerbated a credit crunch. Sachs and Woo (1999) stress that raising the capital adequacy ratios and sudden closure of financial institutions led to a credit crunch in Asia, which deepened output decline and worsened panic. Radelet and Sachs (1998) also argue that one of the mistakes made by the IMF during the Asian crisis was its assumption that tough action on restructuring financial markets would reassure foreign creditors to the extent that they would roll over short-term claims as they became due.

Regarding to this, Ghosh and Ghosh (1999) find some evidence of credit crunch in late 1997 as the banking crisis deepened[1]. They show that in Korea and Thailand, real credit supply decreased in late 1997 and early 1998, but the drop in real credit was sharper. Meanwhile, Yoshitomi and Ohno (1999) explain that in Korea a severe credit

[1] Ghosh and Ghosh (1999) define a credit crunch as a case in which the (often low or negative) real interest rates may not have cleared the credit market and thus there was quantity rationing.

contraction began in the spring of 1998 and continued until October 1998, as evidenced by a marked reduction in the loan-to-deposit ratio. In the case of Thailand, the crisis led to a reduction in capital utilisation and created unemployment. Many financial institutions were forced to close down resulting in severe credit crunch, high NPL and entered a period of financial market dysfunction (Chaipravat and Hoontrakul, 2001)

Hereafter, each crisis hit countries therefore revised and imposed several measures in response to the situations. In view of the fact that some banks would fail due to the adverse impact of a sharp depreciation on foreign liabilities, **adequate liquidity** should rather be provided to the domestic banking sector and, in the presence of a credit crunch, directly to the non-financial private sector. **An expansionary monetary policy was replaced**[2], since it is necessary to moderate a sharp liquidity contraction either through a credit crunch or the bankruptcies of banks. This would thus promote export and output growth and restore investors' confidence. Eventually, this policy would attract capital inflows, induce domestic investors to repatriate their capital from abroad, and turn bankrupted banks into solvent ones.

As a result, the countries examined in the paper experience success in terms of meeting the stated objective of lower interest rates, stabilising exchange rates and gaining economic recovery. This success cannot be generalised and it cannot be argued that the right monetary policy response are the most important part in dealing with and helping the economy from the crisis, as it is pointed out that the Asian economic recovery had a lot to do with the country's strong fundamentals, sound macroeconomic policy framework, and effective institutions (Kawai and Takagi, 2003, and Johnson et al., 2006).

On the whole, the implementation of monetary policy in the 3 countries aiming to regain economic recovery and stabilise the exchange rate after the crisis were successful. Indeed, the future issue for monetary policy soon became the issue of how the country should manage capital inflows and pressures for currencies appreciation.

Figure 6: Nominal Exchange Rate against USD (Jan 1997- Dec 2006)

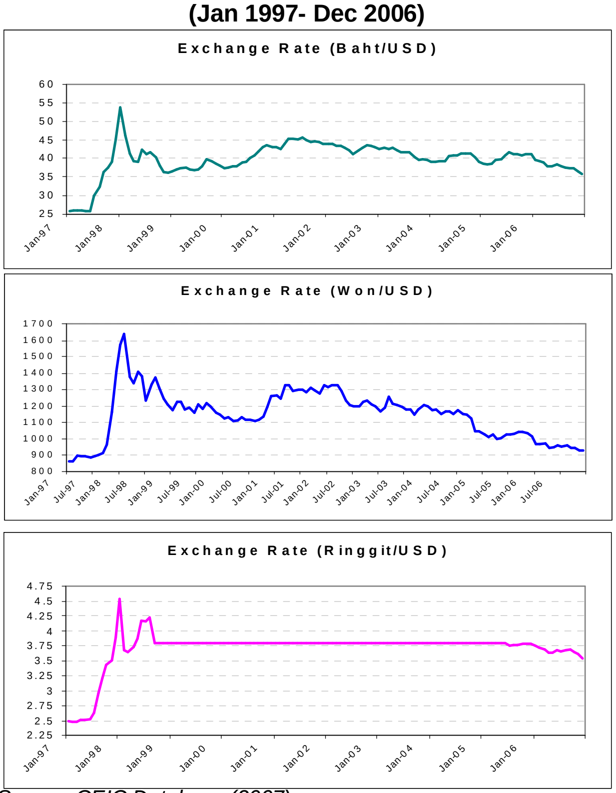
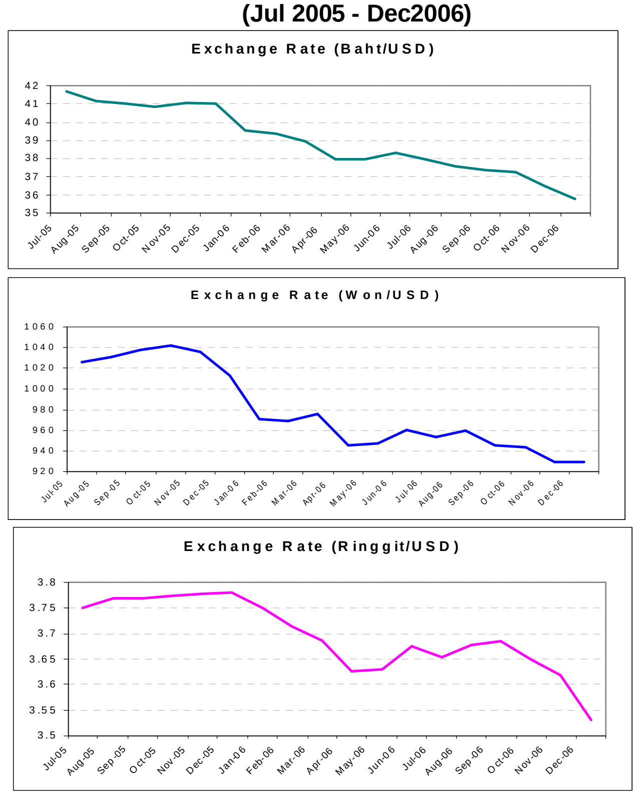


Figure 7: Nominal Exchange Rate against USD (Jul 2005 - Dec2006)



Source: CEIC Database (2007)

[2] The Central banks reduced the interest rates since late 1998. This is to complement fiscal policy in stimulating domestic demand and encouraging economic activities[0].

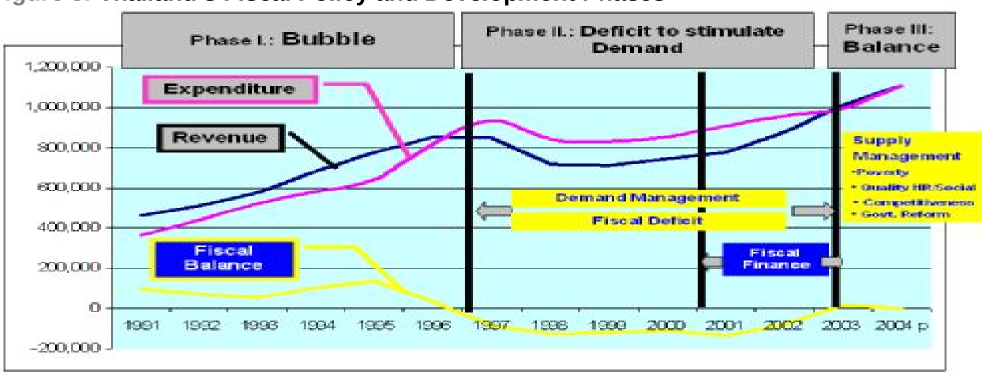
Supporting the Recovery – The Conduct of Fiscal Policy

Another fierce policy debate during the crisis management period was on fiscal policy. Focusing on shrinking current account deficit so that a country would have foreign exchange to compensate the capital outflows, the IMF included fiscal restriction in the policy package. The increase of tax rate i.e. VAT rate and the reduction of current expenditure, were generally suggested. Coupled with high interest rate, the policies in fact reduced liquidity in the market and caused economic slum which in turn jeopardising the tax bases and lower the revenue.

After a long year of debate and suffering from the policy impact, the fiscal policy from the mid-1998 onwards shifted from budget balance or surplus as suggested toward more supportive stance through provision of temporary demand stimulus. The record shows that Thailand, Indonesia, and South Korea had been implementing fiscal deficit policy for many years following the crisis.

Thailand's fiscal policy and development phases are present in Figure 8.

Figure 8: **Thailand's Fiscal Policy and Development Phases**



Source: FPRI (2007)

In the early stage of crisis management, Thailand imposed tight fiscal policy by reducing spending by 40 billion baht and 180 billion baht respectively. Budgetary operations were limited so as to bring about a reduction in the current account deficit as well as to reduce inflationary pressure arising from the currency's depreciation. However, as it turned out the fiscal deficit prevailed as government revenue was much lower than expected. The policy reversed in the later half of 1998. In order to stimulate the economy as such, there was hence off-budget expenditure. The *targeted fiscal deficit* (excluding interest costs of financial sector reform) grew from 2 percent to 6 percent by April 1999, although the actual deficit for 1998/99 was estimated to have been under 5 percent (inclusive of interest costs of financial sector reform, amounting to almost 2 percent of GDP, the deficit was about 6.5 percent). Much of the increased spending focused on boosting social safety net programmes to ensure the protection of Thais affected by the crisis. The financial resources came mainly from loans under the Miyazawa Plan of the Japanese government. In this case stimulation came at the cost of increasing public debts.

The debate on fiscal policy in Thailand did not end there, but later 2 crucial issues followed.

> First, in 2001, the IMF suggested a height of VAT rate from 7 to 10 percent as written in the letter of intents. If the one-short increase cannot be done, the 1 percent raised in the 3 year period was suggested as a compromised solution. The government refused because the rise might mean pressing more impact onto the already sluggish economy after the burst of the bubble dotcom. The government however reduced some specific tax rate—especially of tax on the real estate development-- to stimulate the domestic demand instead.

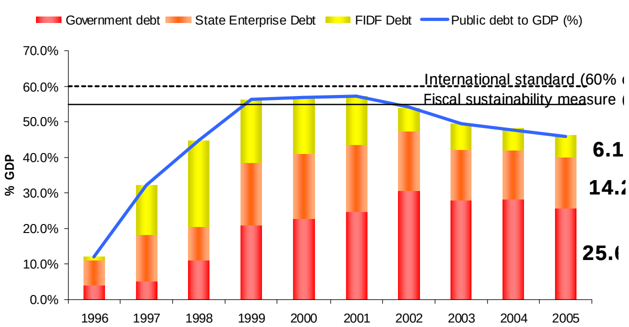
> Second, in 2001 the newly elected government introduced the "fiscal finance" policy and measures to stimulate domestic demand. The fiscal finance was to utilize excess liquidity caused by dysfunction of the financial market. This unorthodox policy raised concerns of the international financial institutions and credit rating agencies because the fiscal finance was treated as an out-off budget expenditure. The argument from the government was that unproductive resource was in the financial sector, and to utilize it was a win-win solution. In contrast to traditional stimulus by fiscal deficit, the fiscal finance did not immediately increase the public debt. The fiscal burden could be realized only when the loan turned into non-performing loan.

The fiscal finance was an alternative channel of credit, thereby reducing the burden of the banking sector, creating new demand, and reducing asset price from sliding down. The excess liquidity was transferred directly to citizens in the form of village funds project whereby the source of fund came from the Government Saving Bank (GSB) and the payment flows are tied to future government budget. On top of this, there were various schemes under quasi-fiscal measures, e.g. SME financing, retail financing and mortgage financing, through various SOEs, e.g. SME bank, Government Saving Bank, Government Housing Bank.

It should be noted that fiscal finance was a part of the *demand management* of the dual tracks policy which aimed to ensure a balanced growth between exports and domestic demand. In this connection, governments have attempted to strengthen different layers of the domestic economy, comprising the grass-roots economy, small- and medium-sized enterprises (SMEs) and large-scale business establishments[3]. In addition, the establishment of TAMC House for civil services and reduction of real estate transfer fee were aimed to stimulate the real estate sector. On the external front, the government intended to expand export bases via FTA. On the whole, the government restored the fiscal sustainability plan with the objective to create the country's fiscal discipline (targeted fiscal balance in 2005).

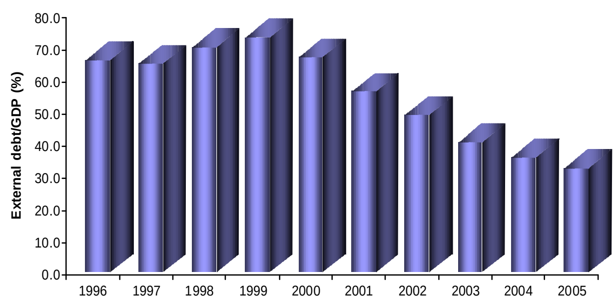
The policy paid off. The economy recovered quickly. As a consequence, the fiscal position turned into a balance position in 2004, two years earlier than first expected (see Figure 11). Building on the strong performance in recent years, the Thai government intended to keep fiscal policy broadly balance. In addition, the country experienced significant growth in the private sector consumption, tourism and exports - economic growth at 5-6% in 2003. Since the crisis, private investment is recovering, reaching capacity limit and was expected more investment growth. Thai baht is strong compared to USD. Regarding the fiscal sustainability measures, we see that the public debt to GDP and external public debt to GDP are much lower recently. Nevertheless, with the slowdown of the economy and a low investment since the end of 2004, the government have announced plans to frontload investment spending in order to boost the investment.

Figure 9: Thailand's Public Debt to GDP (1996-2005)



Source: Office of Public Debt Management, Thailand (2006)

Figure 10: Thailand's External Debt to GDP (1996-2005)



[3] For example, the government has established a revolving village fund and a People's Bank Programme to provide micro-credit to promote economic prosperity at the grass-roots level. For SMEs, the government introduced new tax schemes for SMEs as an incentive for their investment. The SME Development Bank was also established to provide financial and advisory services to SMEs. Large-scale enterprises are being strengthened through the Thai Asset Management Corporation (TAMC), which has facilitated the debt and corporate restructuring for large corporations.

After the crisis hit in 1997, the V-shaped recovery of Korea during 1998-2000 is an unprecedented phenomenon. Since the exchange rate stability was one of post-crisis main targets, the use of monetary policy to stimulate the economy was limited. *To counter the distressed economic conditions, in 1998 Korean government, like Thailand, started using fiscal policy as a key catalytic tool.*

Though the fiscal expansion successfully stimulated the economy, there are concerns on the post-crisis budgetary figures due to massive off-budget expenditures. It is found that off-budget items include the issuances of bonds financing the Korea Deposit Insurance Corporation (KDIC), the Korea Asset Management Corporation (KAMCO) and other government-guaranteed bonds to support financially-distressed small and medium firms. In 1998 KDIC and KAMCO issued government-guaranteed bonds of 39 trillion won, twice the amount of total treasury bonds issued in that year. If these amounts were included in the official budget, the ratio of 1998 budget deficit would rise from 4% to 15%.

Similar to Lee, Rhee and Sung (2006)'s work on re-estimating the reported budget balances, Koh (2005) adds off-budget items (e.g. loans to KDIC, KAMCO and issued restructuring bonds) into the fiscal balances and shows that the adjusted deficit amounts are higher than the official values of 1998-2005. However, this study states that there is no serious concern on budgetary deficits during 1998-2005. Moreover, Lee, Rhee and Sung (2006) compute the responsiveness of the fiscal surplus/deficit to the business cycle. Their computation shows that the responsiveness increases post-crisis. *This finding confirms that the fiscal programs working through KDIC and KAMCO played a great role in stimulating the economy.* Moreover, this study also shows that the massive issuances of government bonds result in the development of bond market in Korea. Since the crisis, the trading volumes of Korea government bonds have been increasing and the market becomes one of the most active markets in Asia (see Kang, Kim and Rhee (2004) for more details).

Similar pattern of fiscal policy management in handling the financial crisis was also evident in Malaysia. The government tightened the fiscal policy at the onset of the crisis but soon after switched to an expansionary fiscal policy and demand stimulus packages were introduced to respond to the crisis. According to Vijayaledchumny (2003), in the early stage, the fiscal measures induced a selective increase in infrastructure spending, programs to support SMEs, and a reduction in taxes. The amount of first stimulus package was MYR 7 billion, and this led to the first fiscal deficit of 1.8% of GDP after five years of surpluses.

However, Malaysia has continued its budget-deficit policy up until now. The prevailing deficit, in many circumstances, is not desirable but a declining trend of fiscal deficit had been witnessed and still in line with the expectation of the government.

Figure 11: Thailand, Korea and Malaysia's Fiscal Balance (% of GDP)

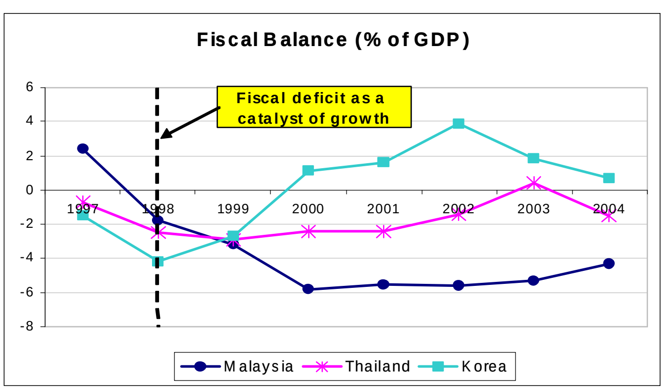
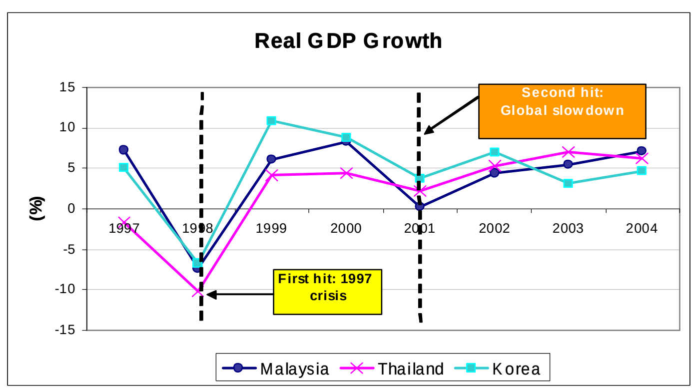


Figure 12: Thailand, Korea and Malaysia's Real GDP Growth



Source: FPRI (2007)

In conclusion, Thailand, Korea and Malaysia employed similar demand stimulus packages. Combined with the easing of monetary policies to support demand, the measures fit well to the situation and played a big part in improving sentiment, and contributing to the quick economic recovery.

Financial Sector Restructuring

The financial crisis in East Asia has had a significant impact on the financial sector of the affected countries. It has caused systemic insolvency problems for commercial banks and non-bank financial institutions. The financial sector restructuring was central to the structural reform programme. This section outlines the main elements of the strategy adopted, assesses the main achievements, and reviews some of the key items that remain on the agenda.

Strategy and Achievements

Phase 1 – 1997-2000: The Crisis Management Mode[4]

In an effort to get the banking sector back on track from the repercussions of the Asian financial crisis, corporate and debt restructuring and bank recapitalisation exercises were implemented by government agencies in Malaysia and Thailand (see also Appendix 8). To resolve urgent problems brought by the financial crisis, authorities in Thailand, Malaysia and Korea established various institutional arrangements, programs and initiatives. Table 7 provides a summary of measures to address the financial sector distress in Thailand, Korea and Malaysia. The approaches taken varied substantially from country to country, reflecting the differences in the magnitude of the problem, initial conditions of the economy and the nature of the corporate system. Nonetheless, the important common elements of these measures can be found, including closure of deeply insolvent financial institutions, protecting depositors by issuing a blanket guarantee, carving out and transferring bad assets to a central management agency and capital injection of massive funds from private and public sources and cleaning up the balance sheets and recapitalising surviving institutions.

Table 3: **Changes in the Number of Financial Institutions in Thailand**

Financial Institutions	Pre-Crisis June - 97	Dec - 02	Dec - 04	Oct - 05	Jan - 06
Domestic Private Banks	14	6	6	8	10
Domestic Private Banks (with the majority foreign ownership and control)	0	4	3	4	4
Foreign (single branch) Banks	22	20	20	18	17
Total Commercial Banks	**37**	**33**	**32**	**33**	**34**
Finance Companies	102	19	18	13	9
Credit Foncier Companies	11	6	5	5	4
State-owned Specialized Financial Institutions	7	10	10	10	10
Total Financial Institutions	**157**	**68**	**65**	**61**	**57**
Stand-alone IBFs of Foreign Banks	15	7	4	2	0
Total	**172**	**75**	**69**	**63**	**57**

Source: World Bank (2006)

As a result of the crisis and the implementation of the reforms described above, the state of the financial sector has been transformed radically and its viability has been evident (Table 3). The programmes have led to substantial improvement in balance sheets in the corporate sector and stronger capital base in the banking and finance industries. This is apparent in the sharp drop of their non-performing loan (NPL) ratios and their healthy risk-weighted capital adequacy ratios (RWCAR). The NPL ratios in all countries have fallen steadily in the past five years (Table 4). As

[4] Appendix 7 presents a chronology of financial institution closure in Thailand and Korea during March 1997 – July 1999

evidence of the renewed health of the banking sector, the three countries have seen their bank financial strength indices remain constant or rise in the past two years (Table 5). Moreover, the number of financial institutions has been significantly reduced, some sections of the financial system are much reduced in importance, and the remaining institutions have had their financial and operational structure improved. There has been a significant change in the ownership and foreign participation as well. Table 3 indicates that the restructuring process has evidently led to a significant consolidation in the banking sector in Thailand.

Table 4: **Non-Performing Loans* (percentage of total loans)**

NPLs	1997	1998	1999	2000	2001	2002	2003	2004	2005
Thailand	20.7.	45.0	38.9	17.7	10.4	15.7	12.7	10.7	8.2
Malaysia	4.1	13.6	11.0	9.7	11.5	10.2	8.9	7.5	5.8
Korea	8.0	20.0	11.3	8.1	2.8	1.9	2.0	1.6	1.0

Source: CEIC Database (2006) & World Bank (2006)

Table 5: **Financial Soundness Indicators**

	1998	1999	2000	2001	2002	2003
Bank regulatory capital to risk-weighted assets (%)						
Korea	8.2	10.8	10.5	10.8	10.5	10.5
Malaysia	11.8	12.5	12.5	13.0	13.2	13.7
Thailand	10.9	12.4	11.9	13.9	13.7	14.0
Bank capital to assets (%)						
Korea	2.8	3.9	3.8	4.1	4.0	4.1
Malaysia	8.2	8.4	8.5	8.5	8.7	8.5
Thailand	5.9	6.0	4.3	5.1	5.8	6.4
Bank provisions to NPLs (%)						
Korea	46.2	66.6	81.8	85.2	109.4	NA
Malaysia	NA	39.0	41.0	37.7	38.1	38.9
Thailand	29.2	37.9	47.2	54.9	61.8	72.8

Source: IMF Global Financial Stability Report (2004)

Furthermore, Table 6 shows that Thailand, Korea and Malaysia have made significant progress in balancing the internal funding sources well in the capital markets. It was believed that an efficient capital market can provide better management of capital flows than the banking channels. Many countries have since liberalised their capital markets and allowed more foreign participation, as well as relaxed rules governing foreign exchange administration, in order to promote efficiency of business operations and allow for better risk management of investments.

Table 6: **Sources of Domestic Finance**

	1996			2004		
(% of GDP)	Debt Securities	Bank Loans	Equity Utilisation	Debt Securities	Bank Loans	Equity Utilisation
Malaysia	72.5	63.3	122.3	90.5	114.4	156.4
Thailand	10.4	59.6	20.1	36.8	83.7	68.8
Korea	45.0	41.2	10.7	21.6	65.8	53.0

Source: BIS, CEIC Database, International Financial Statistics, Bloomberg and Official Figures

Ongoing Restructuring: A Mixed Picture

Phase 2 – 2001-present: Creating Blueprint for the Future

The reforms have, however, been more modest over the more recent period (2001-2005). Specifically, the authorities have placed more emphasis on overcoming structural weaknesses and inadequate infrastructure in the financial system that contributed to the crisis. In the three crisis-hit countries, much of the reform that has been taking place since 2001 has shifted from the mode of crisis management to more comprehensive financial restructuring and development to prevent similar crises in the future. For this objective, a more risk-focused supervisory regime has been adopted by the authorities. Given pronounced changes taking place in the global financial sector, the three economies have also engaged in financial sector liberalisation (calling for the needs for domestic reforms to minimise risks and financial instability associated with the liberalisation). As it will be presented below, two of the three nations came up with their master plan to guide such reforms in the sector.

The Financial Sector Master Plan[5]

In March 2001, the Bank Negara Malaysia (BNM) launched the Financial Sector Master plan (FSMP), its ten-year road map for the country's banking and insurance sectors. The FSMP is fairy extensive and includes specific recommendations that have been implemented in three phases. The first FSMP phase, covering the years 2001-2003, is described as the Domestic Capacity Building period. As it focuses on measures to strengthen the capability and capacity of domestic financial institutions. The second phase, planned for 2004-2008 period, highlights the gradual relaxation of regulatory restrictions imposed on foreign banks to promote greater competition in the country's financial services environment. Integration with the international market is the third phase (2008-2011) of the master plan (the Bank Negara Malaysia, 2007).

Thailand began the process of establishing a financial sector master plan in January 2002. The plan, which became effective after it was endorsed by the Cabinet in January 2004, envisions the future of Thailand's financial sector with comprehensive financial services, particularly in the rural areas, and adequate protection for consumers. The implementation in the first three years of the plan has focused on restructuring and strengthening existing financial institutions and improving the level of competition. After three years, new entrants may be allowed to enter the sector, but this is subjected to the state of Thai economic conditions at the time (World Bank, 2006). Concisely, the master plan proposes:

1) measures to broaden general access to financial services, including promoting financial services to low-income households;
2) measures to increase efficiency of the sector by streamlining rules and regulations on commercial banks, finance companies and credit foncier companies; and
3) measures to protect consumers by encouraging more consumer information disclosures and introducing deposit insurance to replace the blanket guarantee.

The Financial Sector Reform Initiatives: Progress & Future Plans

In contrast to Malaysia and Thailand, Korea did not have a financial sector master plan, nor new financial restructuring agencies. It simply expanded the functions of KAMCO and KDIC. What Korea did create was a new integrated financial supervision framework for prudential regulation and supervision, which not only orchestrated the financial reform process, but also sought to address underlying weaknesses in its financial structure. This framework thus led to the establishment of the Financial Supervisory Commission (FSC) and the Financial Supervisory Services (FSS) in 1998 and 1999, respectively. Broadly, the FSC is charged with policy formulation for the Korean financial market, while the FSS is responsible for the supervision and examination of all financial institutions in Korea (Financial Supervisory Service, 2005).

It is within this framework that the FSC/FSS have supervised the financial restructuring process in Korea. Thus, the objective is not just to clean up bad debts and recapitalise banks, but to shift government-led bank restructuring to more market oriented reforms. In this sense, a master plan for the Korean financial sector becomes redundant. Overall, Korea's experience with this integrated supervision has been deemed as a successful one, though some recommended further reforms in Korea's system of financial supervision (Kim & Lee, 2005).

[5] See further details in Appendix 10

Remaining Agendas

As it is often pointed out in the literature on reforming regulatory structures, there is no single best approach. Integrating financial services supervision has been adopted in many countries including Korea, while Malaysia's master plan to date seems to be more comprehensive in terms of scope and depth, and has more fully developed policy recommendations and strategies.

For Thailand, the inadequate legal and institutional infrastructures have hampered the progress of its financial sector reforms. This problem needs pressing attention so Thailand's financial regulatory system would be able to move towards a better supervisory system that enhances the sector's overall efficiency.

In relation to global financial standards, movement towards Basle II standards should be phased-in to avoid imposing too much burden on local banks and other possible adverse effects (e.g. from pro-cyclical effects). Focus should be on providing necessary technical supports, e.g. improving the data and information support system needed for better risks management methods through enhanced credit bureau system. Bank consolidation should help banks to cope with the burden of moving towards new standards in risk management, but this process too should be facilitated by the necessary legal and regulatory changes.

In sum, we examine Thailand, Korea and Malaysia's measures by addressing the financial sector restructuring in Table 7. There is still a long way to go to complete the restructuring and reform processes. Restructuring should be an ongoing, multi-year process, but continued substantial progress is of essential important.

Table 7: **Summary of Measures to Address the Financial Sector Turmoil**

Measure	Thailand	Malaysia	Korea
The Immediate Post-Crisis Period (1997-2000)			
Emergency Measures			
- Liquidity support	ü	ü	ü
- Introduction of a blanket guarantee	ü	ü	ü
Institutional Measures			
- Establishment of an overarching restructuring authority	û	ü	ü
- Establishment of a separate bank restructuring authority	û	ü	û
- Establishment of a centralised asset management corporation	ü	ü	ü
Restructuring Measures			
- Closure of insolvent financial institutions	ü	ü	ü
- Use of public funds to purchase nonperforming assets	û	ü	ü
- Use of public funds to recapitalise institutions	ü	ü	ü
Other measures			
- Measures to encourage corporate restructuring	ü	ü	ü
- Steps to improve prudential supervision and regulation	ü	ü	ü
Creating Blueprint for the Future (2001-present)			
Financial Sector Master Plan	ü	ü	û
Financial Sector Regulatory Reforms			
- Integrated financial services supervision	(considered)	ü	ü
- Movements towards risk-based supervision	ü	ü	ü
- Single National Credit Bureau	ü	?	?
- Movements towards compliance to international standards (Basel II)	ü	?	?
- Limited guarantee on deposits	ü	?	?
Financial Services Liberalisation	(considered)	(considered)	In progress

Source: FPRI (2007)

The Economic Recovery

Factors Contributing to Asia's Recovery

Global and Regional Economic Growth

The supportive external environment had played a leading role in the recovery and contributed to a sharp turnaround in the current account. However, during the period of recovery, a number of uncertainties posed by the world economy did arise. Among others, the unwelcome uncertainties include the 9/11 attack, tensions in the Middle East, the burst of the bubble dotcom, and most recently increases in oil prices.

Figure 13: **Annual Global GDP Growth Rate (%Y/Y)**

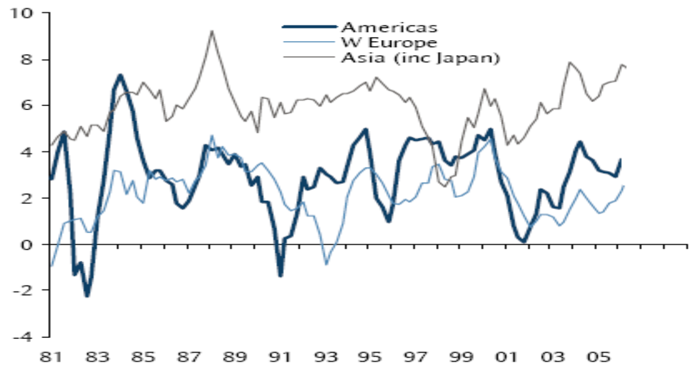
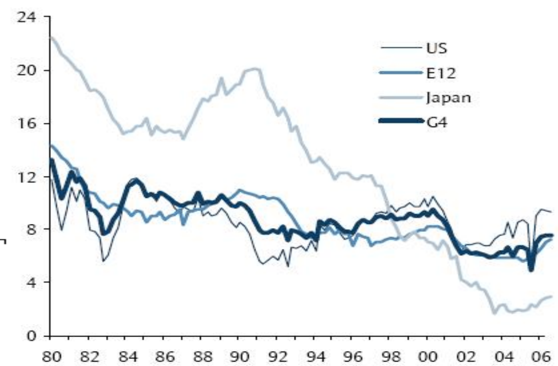


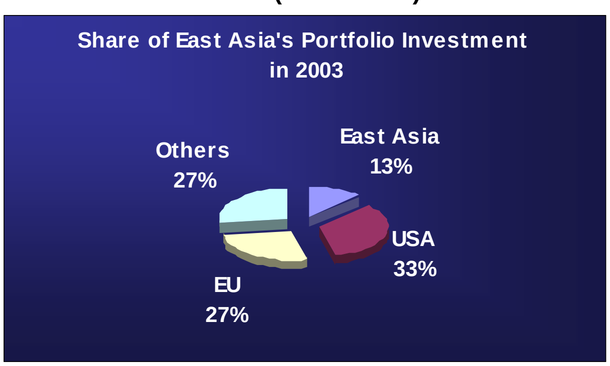
Figure 14: **Net Investment/Net Domestic Product (%)**



Source: Barclays Capital (2006), using IMF Weights and National Sources

Note: G4 represents US, Euro area, UK and Japan

Figure 15: **Share of East Asia's Portfolio Investments in 2003 (USD Billion)**



Source: adapted from Chu et al. (2006)

Table 8: **Trade Share of East Asia in the World (% of total)**

	1980	1990	2000	2001	2002	2003
East Asia	13.9	18.2	22.2	21.4	22.1	22.2
USA	13	13.2	15.5	15.4	14.5	13.2
EU	43.1	45.3	37.5	38.8	39.2	40.3
Others	30.0	23.3	24.8	24.4	24.2	24.3
World	100	100	100	100	100	100

Source: adapted from Shin and Sohn (2006)

The strongest shock was recorded in 2001 when the worlds GDP growth rate dropped to 1.6 % from that of 4.2% in the year earlier (EIU Database). The bubble dotcom in the US clearly accounted for part of this. It also became evident in the second quarter of the year that the contagion had spread to other regions (Bank Negara Malaysia, 2001). Of course, Korea, Thailand, and Malaysia are no exception. The world's GDP picked up in 2004 with over 3% growth.

Furthermore, recent statistics show that the world's economy is mainly driven by the US, with support from the rise of China and India (Bank of Thailand, 2005). Clearly, the early recovery path of countries affected by the 1997 crisis coincided with the time the world witnessed the emergence of China. The emergence of China has brought positive externalities to other East Asian economies including the crisis-affected nations. The openness of the Chinese economy has played and will continue to contribute an important role in the world economy at large and the East Asian economies alike. It is undeniable that China contributed to the external factors that helped the crisis-hit countries recover at a reasonable pace. The main channel through which this happened is cross-border trade.

Figure 16: Exports of Emerging Asia and China

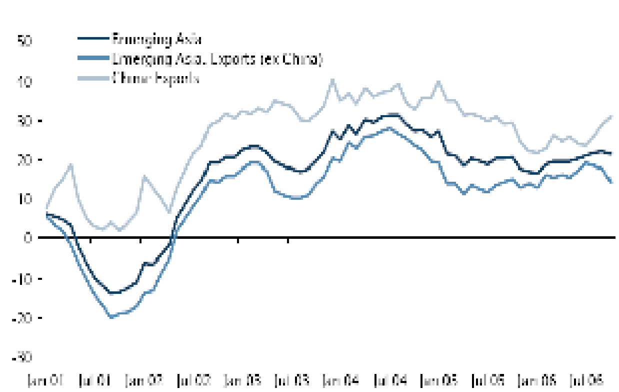
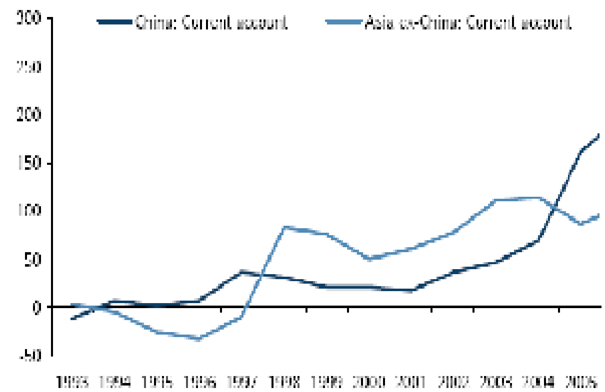


Figure 17: C/A of Emerging Asia and China (UD$ bill.)



Source: CEIC Database (2006)

China itself grew strongly as its GDP rose from 8,982 million USD in 1997 to 14,170 million USD in 2003. Parallel to this, its trade volume increased considerably and China is forecasted to be the largest exporter by 2010 (OECD, 2005). In 2000, substantial increases of 26.5% in exports and of 31.7% in imports were recorded (World Bank Development Indicators). By looking into the compositions and directions of China's trade, Yoshitomi (2006) points out that the main source of Chinese intermediate imports is East Asia. *This is favourable because Chinese demand helped drive the exports of crisis-hit countries.* The share of ASEAN5 in China's imports for processing was 4.26% in 1995; subsequently rose to 22.6% in 2003 (China Customs Statistics, 2006). Also dramatic is the share of Korea and Taiwan imports which increased from 17.9% to 53.3% in those two respective years.

Figure 18: Imports of China from various regions

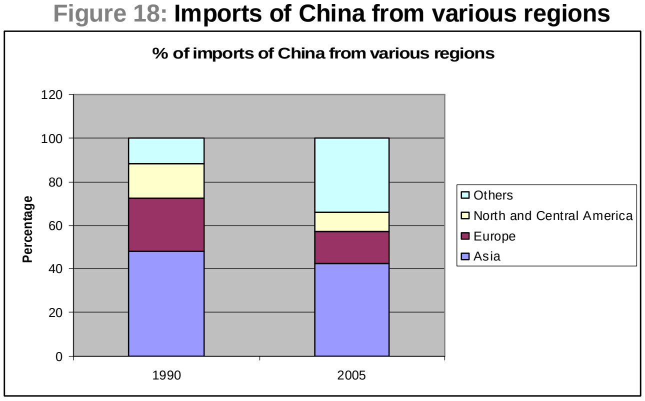
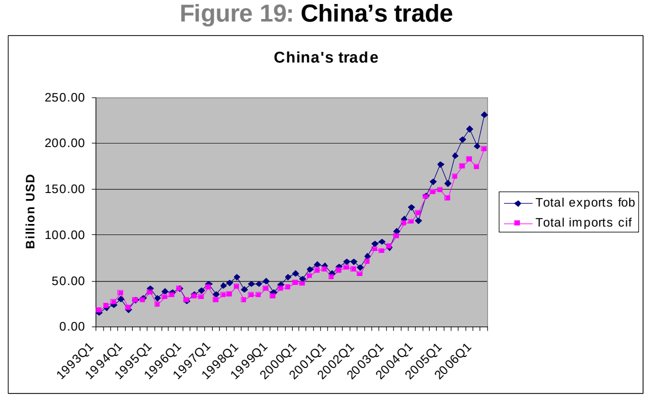


Figure 19: China's trade



Source: EIU Database (2006)

Therefore, the openness of China is of particular relevance for the recovery path of Korea, Malaysia, and Thailand as such openness arose at the same time as these countries attempted to stimulate domestic activities; therefore such integration of China into the global economy was welcoming at the time.

Regarding the ASEAN synergy, particularly trade integration, since 1992, ASEAN has been undergoing a tariff reduction programme called the Common Effective Preferential Tariff (CEPT) scheme. From 1993 to 2003, intra-ASEAN merchandise trade has doubled. Following the success of the CEPT scheme, the intra-ASEAN integration is expected to help boost the competitiveness of the 11 priority industries of ASEAN, thus also supporting path of the crisis recovery. Moreover, road maps have been agreed upon for each sector, embodying all measures to promote intra-ASEAN trade and investment, ranging from tariff and non-tariff barrier eliminations to technical cooperation and regulatory harmonisation. It indicates the growth momentum in trade integration in ASEAN.

Low Interest rate and low inflation pressure

A major contributor from the global economy has been the persisting low levels of interest rates which continued to fall whilst the world GDP growth rate gradually improved. One may consider the US 3-month commercial paper (see Figure 20). The rate for this reduced markedly from over 6% in the last quarter of 2000 to approximately 1% in the first quarter of 2004. Since then, it has continued to increase. As for inflation, there has been a downward trend in the world consumer prices. The annual percentage change in 1997 was 5.8%. Afterwards, the figure has been within the range of 3.5% to 4% since 2001.

Figure 20: Interest rate (Money Market Rate

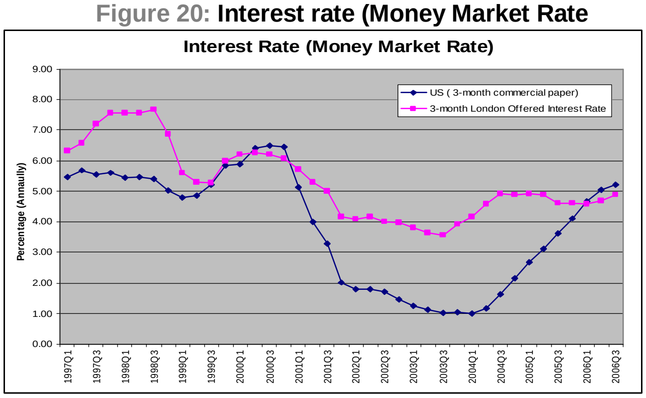
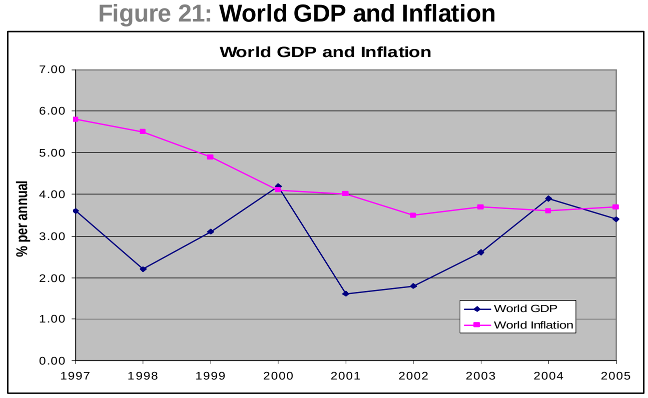


Figure 21: World GDP and Inflation



Source: EIU Database (2006)

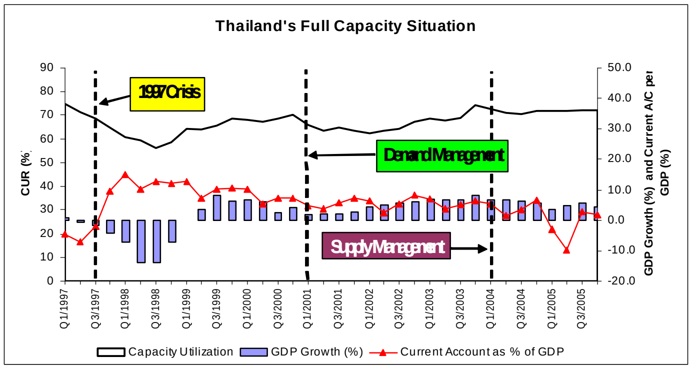
Low investment, however

During 1998-2000, the strong exports have played a great role in boosting economic growth. Thailand, for example, benefits from external competitiveness following the substantial *depreciation of its currency. The surge in global demand of Asia's export thereby gives the edge for the country to recovery.* Similar effects are also experienced in Korea and Malaysia.

It should be noted however that the current account surplus after the crisis in Thailand, Malaysia and Korea, did not only come from export expansion but also the result of *import compression.* ***The sudden drop of the capacity utilisation after crisis means that there is some existing free productive capacity to serve the need of domestic demand as well as export without increase the new investment.*** In the case of Thailand, the *current account* moved from a deficit of about -2.1 percent of GDP in 1997 to a *surplus* of 4.5 percent of GDP in 2004. In the same period, the real private investment contracted by 11.5 in 1997, and turned positive growth at average 4.5 percent during 2000-2006. However, the rate of growth was far behind the 10-15 % private investment before the crisis. As a result, Thailand's current account surplus was average 4.4 percent of GDP during 1999-2004.

The turnaround of strong exports, low investment and low imports were contributed the current account surplus and replenish of the international reserves. The macroeconomic turn around when combined with fiscal sustainability, the investor confidence has been restored and the recovery has been fulfilled.

Figure 22: **Thailand's Full Capacity Situation**



Source: FPRI

Table 9: **Capacity Utilisation (End of period)**

	1998	1999	2000	2001	2002	2003	2004	2005
Thailand	61.7	67.9	68.6	62.0	66.1	77.4	73.0	73.7
Malaysia	76.4	84.8	85.2	79.6	78.8	81.1	82.2	83.0
Korea*	86.9	95.7	100.9	104.8	107.9	111.4	116.9	122.1

Source: CEIC data
*Note: * Manufacturing production capacity index (MPCI); year 2000=100*

Table 10: **External debt/gross international reserves**

	Gross international reserves (US$ bn)		External debt (US$ bn)		Debt/reserves (%)	
Countries	1998	2004	1998	2004	1998	2004
Malaysia	26.17	66.72	44.73	52.78	170.92	79.11
Thailand	29.54	49.83	105.06	51.31	355.65	102.97
Korea	51.97	198.99	139.27	172.25	167.98	88.56

Source: Asian Development Outlook 2003 and 2005, ASEAN Finance and Macroeconomic Surveillance Unit (FMSU) database and Official Figures.

Table 11: **Stabilised debt service ratio**

	1997 (%)	2004 (%)
Malaysia	5.5	4.4
Thailand	15.7	8.4
Korea	8.2	5.6

Source: International Monetary Fund (World Economic Outlook 2005), Asian Development Bank

Table 12: **Thailand, Korea and Malaysia's Key Economic Indicators 1997 – 2006**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Real GDP (% change)										
Malaysia	7.3	-7.4	6.1	8.3	0.3	4.4	5.4	7.1	5.2	6.0
Thailand	-1.7	-10.2	4.2	4.4	2.2	5.3	7.0	6.2	4.5	4.6
Korea	5.0	-6.7	10.9	8.8	3.8	7.0	3.1	4.6	4.0	5.0
Inflation (% change)										
Malaysia	2.7	5.3	2.8	1.6	1.4	1.8	1.2	1.4	3.1	3.6
Thailand	5.6	8.1	0.3	1.6	1.6	0.7	1.8	2.7	4.5	4.6
Korea	4.5	7.5	0.8	2.3	4.1	2.7	3.6	3.6	2.8	2.3
Current Account Balance (% of GDP)										
Malaysia	-5.9	13.2	15.9	9.4	8.3	8.4	12.8	12.6	15.7	13.0
Thailand	-2.1	12.8	10.1	7.7	5.4	5.5	5.6	4.5	-2.1	-2.5
Korea	-1.7	12.7	6.0	2.5	1.7	2.8	3.2	4.2	2.0	1.5
Fiscal Balance (% of GDP)										
Malaysia	2.4	-1.8	-3.2	-5.8	-5.5	-5.6	-5.3	-4.3	-3.8	-3.7
Thailand	-0.7	-2.5	-2.9	-2.4	-2.4	-1.4	0.4	0.3	0.1	0.4
Korea	-1.5	-4.2	-2.7	1.1	1.6	3.9	1.8	0.7	0.6	0.6
Recorded Unemployment (%)										
Malaysia	2.5	3.2	3.4	3.1	3.7	3.5	3.6	3.5	3.6	3.7
Thailand	1.5	4.4	4.2	3.6	3.3	2.4	2.2	2.1	1.8	1.8
Korea	2.6	2.7	6.6	4.4	4.0	3.6	3.9	3.7	3.7	3.7

Source: EIU Database, Asian Development Outlook and Bank Negara Malaysia

The Challenges Ahead

Crisis Prediction and Prevention

The Asian Policy Forum, a forum of 17 policy-oriented research institutes from 14 Asian countries, issued a report on "Policy Recommendations for Preventing Another Capital Account Crisis" in July 2000. The recommendations and their progress are as follows.

Table 13: **Summary of "Policy Recommendations for Preventing Another Capital Account Crisis"**

Crisis Prevention	Current Progress
Dealing with Massive Capital Flows	***Dealing with Massive Capital Flows***
1. Adopting an Appropriate Exchange Rate Regimes	1. PRC and Malaysia adopted a managed float system. Only Hong Kong maintains a currency board.
2. Establishing Controls on Capital Inflows	2. Controlling capital inflows is believed to be unproductive considering t the nature of the sources (mainly long-term capital) and the sizes of the capital inflows (not being high enough to generate instability). Except Thailand imposed a 30% renumerated reserve requirement on the less than one year capital inflows (except FDI and equity investment)
Minimising Double Mismatch	***Minimising Double Mismatch***
3. Strengthening Prudential Supervision and Regulation	3. Prudential supervision and regulation have been much improved after the crisis. The regional centres like Singapore and Hong Kong lead the pact in good governance practices.
4. Developing the Domestic Capital Markets	4. The domestic capital markets, both equity and bond, have been much improved, and the better balance of bank-based and capital market-based systems can be observed in most of Asian countries.
Crisis Management	**Current Progress**
Managing Sudden Reversals of Capital Flows	***Managing Sudden Reversals of Capital Flows***
5. Bailing-in in the private sector	5. The IMF had once discussed about bail-in measures, but with no subsequent progress. No progress in practice.
6. Restricting holdings of Domestic Currencies by Non-Residents	*6. Most of the countries understand the implication of holdings of domestic currencies by Non-Residents and currency speculation. Close monitoring and tight restriction by allowing only transfers with underlying real transactions was generally practiced.*
Establishing Regional Financial Arrangement	***Establishing Regional Financial Arrangement***
7. Establishing Regional Financial Arrangement	7. The ASEAN Swap Arrangement (ASA) and Bilateral Swap Arrangement (BSA) were established and later increased in size. However, due to weak technical and political supports, peer review, surveillance criteria, and removal of the conditionalities tied to the swap arrangement scheme have not shown much progress.

Source: FPRI (2007)

During the past 10 years, it seems that some progress has been made in line with the suggestions, especially measures that can be implemented unilaterally and domestically, e.g., exchange rate regimes, strengthening prudential regulations, capital market development, restricted holdings of domestic currency by non-residents.

On the regional front, the symbolic Chiang Mai Initiatives (CMI) of self-help and support mechanism led to the establishment of the ASEAN Swap Arrangement (ASA) and Bilateral Swap Arrangement (BSA). Over the past few years, mechanisms to strengthen surveillance have been set up in six member countries in the form of country units for an Early Warning System (EWS)[6]. The creation of the Office of Regional Economic Integration (OREI)[7] by the ADB and the ASEAN Surveillance Coordination Unit (ASCU) in the ASEAN Secretariat was a right move.

[6] The six member countries include Cambodia, Indonesia, Lao PDR, the Philippines, Thailand and Viet Nam.

Future Regional Co-operations

The current international finance is much more complex in dimension as well as in size of the impacts compared to that in Asia during the crisis of 1997. At least, there are three factors contributing to the complexity.

> First, there is the increase in the degree of global imbalance. The chronic current account deficits of the US, which reached 7 percent of the GDP, and the more than 2 trillion $US of foreign reserves accumulated by East Asian nations poses a challenge to Asian policymakers. The political manoeuvres out stage the economic understandings and measures that would bring mutual benefits among regions. The US authorities' consistent complaints about a strong Yuan as well as the actual weakening of the Yen while the other Asian currencies appreciated (vis-à-vis the $US) by 9 percent in 2006, gave an impression that Asia does not have a collective policy stance to deal with the current threat.
>
> Second, after the strong recovery, Asia has become one of the global economic centres. The US, EURO, Asia have been a generalised as the 3 financial pillars of the global financial markets. Since countries in East Asia have become closely linked to one another through trade and investment, the definition of Asian financial centres has been expanded to cover at least Tokyo, Hong Kong, and Singapore. Asia is no longer to be solely impacted by policy issued in the US and EURO, but Asia policy also impacts other regions as well. Collective efforts as a global player, to stabilise the global economy, are new to Asia and remain a new challenge for policy makers and policy researchers.
>
> Third, Asian counties should understand that their stage of development is moving quickly as the time goes by. Many of economies in East Asia (Singapore, Hong Kong and South Korea, for example) have matured and are at the verge of becoming developed nations. Many others are up to (or close to) the full emerging economy status (Malaysia, Thailand, Indonesia, and the Philippines, for example). Understanding the real platform would lead a country to formulate new sets of the right policies –relinquishing uncompetitive activities and promoting new competitive sectors-- and minimising impacts to those affected by the new policies.

As Asia is maintaining competitive strength as global production base, the current account surplus can be sustained in the years to come. It will naturally lead to capital inflows via current account surplus. The pressure on currency value will also come from surplus of the financial account as the high rate of return in Asia entices global FDI and portfolio investment flows. The situation generates a one-side-bet on Asian currencies appreciation vis-à-vis US$, and the pressure will be mounted in the years to come. Failure to manage currency parity among Asian currencies, and Asian currencies vis-à-vis major currencies (US$ and EURO), would mean economic tabulation of highly contagious in the region. It is worth mentioning that there are some policy issues worth considering.

Exchange Rate Arrangement

The strong investment-production-trade ties in Asia can be disrupted by currency fluctuation. With strong investment-production-trade ties, it is by nature that direct exchange – price quotation and currency unit-- in local currency should be promoted as an insulator to reduce currency risk from the current triangular currency exchange. Some form of Asian currency arrangement might be a good step towards Asian Currency Unit (ACU) in the future.

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[7] The OREI, established on 1st April 2005, is the successor of Regional Economic Monitoring Unit (REMU), which was established in 1999, in response to the 1997/98 Asian financial crisis and at the request of ASEAN finance ministers.

Interest Rate Policy and Investment Alternatives in the Region

Being a high growth region, Asia faces a difficult situation in the sense that Asia has to receive more capital inflows from other regions (to enjoy Asia's high rate of return) while it can hardly find the higher rate of return outside the region. It turns out that Asia either ends up with net capital inflows and currency appreciation, or stabilising exchange rate by reinvesting foreign capital outside the region with lower rate of return. There are two ways to maintain stability in this certain situation.

> First is to lower the regional interest rate to the point that the real return from capital inflows (real interest rate and gain from currency appreciation) is no longer attractive. This policy was implemented by some individual countries, as a result their interest rate has no longer moved to the Fed fund rate.
>
> Second, after discouraging short-term flows via low interest rate, Asia might consider to transform capital surplus into physical and social investment necessary for the future sustainable growth. The investment, on the one hand, means increasing imports and reducing current account surplus. On the other hand, new infrastructure project means generating demand for investment fund of high rate of return.

Asian Bond Market Development

Initiatives of Asia bond aims at facilitating regional investment with long-term financial instrument. The holding of long-term bond denominated in local currency means a local firm (or a country) facing much lower currency and maturity risks, the double mismatch which caused the crisis in 1997. Redeeming of bond when lacking confidence, like in the mist of the crisis, would lead to severe penalty by the market system. Comparing with the redeems of the bank loan which clearly stage obligation of the borrowers in terms of payments (currency, principle, interest and penalty), the bond has the secondary market to insulate issuers from any external incidence before the maturity comes.

Complex transaction and multiple currencies trade and investment in the region mean necessity of multicurrency Asian bond to be an instrument in hedging currency risks. Moreover, if Asia is to move to establish some form of Asian currency cooperation, it is inevitable that the Asian bond market must be utilised to stabilise the new exchange rate regime.

Conclusion

During the past ten years, Thailand, Korea and Malaysia have not only experienced severe turmoil in domestic financial and foreign exchange markets, but also remarkable stabilisation and recovery from crisis conditions. Collectively, it seems that the policies adopted by the government are effective and have been instrumental in the recovery from the crisis. Hopefully, what we have learned from this crisis will help us avoid repeating the mistakes which have been so costly in this recent episode. Further continuation of crisis prevention measures is required to ensure continued economy growth and to reduce vulnerability to future crises recurring.

To revisit the region ten years later, we investigate the already-abundant literature on the causes of the Asian financial crisis in Section 2. One conventional explanation, unlike the forerunner crises, entailing weak macroeconomic fundamentals that produce current account (CA) deficit, barely fits the Asian scenario. The crisis was rather a self-fulfilling capital account (KA) or balance-of-payment crisis, exemplified by massive capital inflows accumulation over a period of time and sudden massive outflows in a short period of time. In the event, however, the crisis was not an undisciplined government or poor macroeconomic fundamentals. We conclude that the crisis presents a combination of three inappropriate policies: 1) sustaining fixed exchange rate when it is no longer suitable, 2) allowing too much short-term capital flows to accumulate with in the presence of currency speculation and 3) the lack of sufficient risk management system at the national level as well as at the regional level. *In short, the Asian financial crisis in the 1997 is best described as a classic capital account crisis, coupled with the lack of institutional set up to monitor, to prevent and to alleviate the crisis .*

In Section 3, we emphasise that the rapid recovery is a result of the effective policy response to the crisis implemented by the crisis hit countries. The objectives of Asia's crisis resolution strategy of each country were, first and foremost, to restore confidence and stabilise financial markets, and second, to lay foundations for a sustained recovery in the real economy and prevent future crises. The policy strategy was a combination of macroeconomic policy adjustments, financial recovery plan, and structural reforms. To ease the social impact inevitably accompanied by the reforms, the programme also entitled a substantial expansion of the social safety net.

The early raising interest rates to stabilise the exchange rate caused distress in the financial and corporate sectors. This in turn adversely affected the health of banks and economy. Eliminating the financing constraint – through expansionary monetary policy allowed macroeconomic policies to shift to supporting the recovery. Indeed, a concerted effort to allow the government to run deficits and provide support for the financial sector was an appropriate fiscal response. As a result of a healthy starting position, fiscal policy did not need to be tightened and was able to complement the recovery. Furthermore, substantial expansion of the social safety net facilitated structural reform by mitigating the impact on those most affected by the crisis. Therefore, we find that Thailand, Korea and Malaysia employed similar *demand stimulus packages*. *Combined with the easing of monetary policies to support demand, the measures fit well to the situation and play a big part in improving sentiment, as well as contribute to the quick economic recovery*.

Moreover, the governments have increased their efforts to provide *new impetus to reform and restructuring financial sectors*. The financial crisis in East Asia has had a significant impact on the financial sector of the affected countries. It has caused systemic insolvency problems for commercial banks and non-bank financial institutions. The financial sector restructuring was central to the structural reform programme. Without addressing the root causes of the crisis, attempts to regain market confidence through a stabilisation programme would not have been successful. Yet, unlike the sharp recovery of the macro-economy, progress in financial restructuring reform has been slower. This is hardly surprising, as it is not possible for the tasks to be achieved in a short period of time. There is still a long way to go to complete the restructuring and reform process.

Turning to Section 4, factors contribute for the strong recovery are presented. Firstly, the supportive *external environment* had played a role in leading the recovery and contributed to a sharp turnaround in the current account. Secondly, it is not questionable that China had some role to play in contributing to the external factors that helped the crisis-hit countries recover at a reasonable pace-- because this *Chinese demand* helped drive exports by crisis-hit countries. Thirdly, the *strong exports* have played a greater role in boosting economic growth. Also, fourthly it should be noted however that the current account surplus after the crisis in Thailand, Malaysia and Korea, were not only came from export expansion but also the result of *import compression.*

Therefore, *the surge in global demand of Asia's export thereby gave the edge for the country to recovery.* The turnaround of strong exports, low investment and low imports contributed to the current account surplus and the replenishment of international reserves. With macroeconomic turn around and fiscal sustainability, the investors' confidence has restored and the recovery was attained.

Despite of failures to predict the phenomenon, the Asia financial crisis experience provides some useful lessons for future crisis prevention. Since the crisis raises a number of important issues, we then discuss the challenges ahead the types of corrective policy measures that would prevent the crisis in Section 5.

Meanwhile, positive progress has been made in various respects to be in line with the recommendations, especially measures that can be done unilaterally and domestically e.g. exchange rate regime, strengthening prudential regulation, capital market development, restricted holding of domestic currency by non-residents. Over the past few years, mechanisms to strengthen the surveillance have been made. The country unit of Early Warning System (EWS) was set up in six member countries. For example, Asian Policy Forum, a forum of 17 policy-oriented research institutes from 14 Asian countries, issued a report on “Policy Recommendations for Preventing Another Capital Account Crisis” in July 2000. These are positive steps, yet many challenges still remain.

Despite Asia's current situation --a one-side-bet on Asian currencies appreciation against US$ and the pressure will be mounted in the years to come. Failure to manage currency parity among Asian currencies, and Asian currencies vis-à-vis major currencies (US$ and EURO), would mean economic tabulation of highly contagious in the region. We propose that there are some policy issues worth considering. Firstly, the strong investment-production-trade ties in Asia can be disrupted by currency fluctuations. The concept of “price quotation and currency unit”-- in local currency should be promoted as an insulator to reduce currency risk from the current triangular currency exchange. Secondly, appropriate interest rate policy and investment alternatives in the region should be adopted to reduce the pressure of too much capital inflows from other region and hence currency appreciation. Lastly, promoting of multicurrency Asian bond is important as it would facilitate regional investment with long-term financial instrument and be an instrument in hedging currency risks – lowering recurrence of the double mismatch which caused the crisis in 1997.

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Appendix

Appendix 1: **Table attached to Press Release on Economic and Monetary Conditions in November 2006**

External accounts	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**
Exports	9122	10708	10762	11043	11728	11785	11371	11767
% Change	(11.5)	(18.7)	(17.3)	(17.7)	(17.0)	(14.5)	(20.9)	(21.7)
Imports	9642	11468	11187	11266	11457	10383	10648	10498
% Change	-(2.1)	(9.1)	(2.6)	(16.3)	(11.2)	(9.1)	(8.9)	(6.3)
Trade Balance	-520	-760	-425	-223	271	**1402**	**723**	**1269**
Current Account Balance	-632	-1285	-284	-40	464	826	856	1512
Net Capital Flow	1117	1258	586	625	-190	**1870**	**1154**	**n.a.**
Balance of Payments	811	196	681	454	485	2555	287	1103
Official Reserves (billions of US$)	57.2	57.7	58.1	58.8	59.4	61.6	62.3	64.5

Source: BOT (Monetary Policy Group), 2006

Appendix 2: **Measures on Capital Inflows Between 1998-2006**

Measures on capital inflows

Measures on non-residents

1. Local financial institutions cannot provide liquidity with maturity less than 3 months and value more than THB 50 million per consolidated entity to non-residents without underlying transactions. Approval from the BOT is needed for transactions with value greater than the limit.
2. Local financial institutions are allowed to borrow THB from non-residents or engage in similar transactions without underlying trade or investment not exceeding 50 million baht per entity except for contracts over 3 months.
3. Non-residents are permitted to open only either current or savings non-resident baht accounts (NRBA) for settlement purposes and fixed NRBA with maturity exceeding 6 months for other purposes. The daily outstanding balance is limited to a maximum of THB 300 million per non-resident, with exception considered by the BOT on a case-by-case basis.
4. Local financial institutions are not allowed to enter in non-deliverable forwards (NDFs) against THB with non-residents.
5. Local financial institutions that wish to purchase foreign currencies against THB from non-residents on for value-same-day or value-tomorrow are required to seek prior approval from the BOT.
6. Local financial institutions are prohibited from paying interests on current and savings NRBA except those with approval from the BOT.
7. Lending funds brought in from outside the country for domestic lending must pay withholding tax and interest payment on associated checking accounts is prohibited.
8. Local financial institutions are required to acquire information on NRBA for inspection by the BOT at all time.
9. Local financial institutions are required to acquire information on NRBA for inspection by the BOT at all time.

Measures on residents

1. Commercial banks short-term borrowings (with maturity one year or less) and borrowing with embedded derivatives feature of all maturity from abroad are subject to 6 percent reserve requirement.
2. Foreign investments and incoming resident transfers are freely permitted but must be surrendered to an authorised bank or deposited in a foreign currency account with an authorized local bank with in 7 days.
3. Foreign banks are prohibited from local currency dealing except for the transactions which have underlying trade/activities in Thailand.

Source: BOT (2006)

Appendix 3: Measures on Capital Outflows Between 1998-2006

Measures on Capital Outflows
1. Non-bank lending in foreign currencies require approval from the BOT except for lending to related companies (whose shares of 25% or more are owned by the resident lender) abroad not exceeding USD 10 million. 2. Non-residents (consolidated entity) can get the maximum of 50 million baht of credit facilities in form of derivatives (including swaps and forwards) from all local financial institutions combined without underlying transactions 3. THB direct loan to non-residents is prohibited, except for non-residents being a natural person or situated in neighbouring countries for up to THB 50 million. 4. Resident foreign currency accounts require authorisation except for funds brought in from abroad. There is an obligation to pay authorized persons abroad within 6 months of deposit date, and the amount of deposit must be less than obligation. Outstanding account balances in all accounts are allowed up to USD 10 million for a juridical person and up to USD 500,000 for a natural person. Foreign embassies and international organisation and their employees are exempted from having to show obligation to pay. 5. Measures on financial institutions' net foreign exchange position: End of day net foreign exchange position in any individual foreign currency must not exceed 15 percent of its capital funds, or 5 million US dollar, whichever was higher. International standard on the aggregate foreign exchange position calculated was to be adopted. End of day net open position of all foreign currencies combined must not exceed 20 percent of capital funds or 10 million US dollar which ever was higher.

Source: BOT (2006)

Appendix 4: The New BOT's Rules and Regulations in December 2006

The BOT issued 3 notifications on December 4, December 18 and December 22 aimed at controlling the rapid appreciation of Thai baht by deterring short-term inflows into the debt securities market.

- December 4: Financial institutions are allowed (1) to trade foreign currencies with non-residents for settlements relating to investments of government bonds, treasury bills or BOT bonds only when such investments are longer than 3 months and (2) to borrow Thai baht from non-residents including through sell-buy swap transactions when there is no underlying trades and investments in Thailand for a maturity of longer than 6 months.
- December 18: Financial institutions are required to withhold 30% of foreign currencies bought or exchanged against the Thai baht, except those related to trades in goods and services, or repatriation of investments abroad by residents. After one year, request for refunds can be made by submitting related evidence to prove that the funds have been in Thailand for at least one year. Should any customers wish to repatriate their funds earlier, they would be refunded only two-thirds of the amount.
- December 22: the capital control of December 18, has been exempted to the inflows of equity investment, FDI and investment in real-estate excluding real estate mutual funds.

For detail measures see:
http://www.bot.or.th/bothomepage/General/PressReleasesAndSpeeches/PressReleases/News2549/ListEng.htm

Source: BOT (2006)

Appendix 5: Malaysia's Major Exchange and Capital Controls Response to the Financial Crisis 1997

Date	Policy Objectives	Specific Measures
Sept-98	To deter speculation on the ringgit and gain monetary policy independence	**(a)** Controls on transfers of funds from ringgit-denominated for non-residents not physically present in Malaysia, in effect imposing a 12-month holding period restriction for repatriation of the proceeds from sale of Malaysia securities, with retroactive effect **(b)** Prohibition of offshore transactions in ringgit **(c)** Ringgit pegged at RM 3,8 per US dollar
Feb-99	To pre-empt exodus of capital and reengage foreign investors	Easing of some controls, including replacement of the 12-month holding period restriction for repatriation of portfolio capital by a two-tier, price-based graduated exit levy system
Sept-99	To provide further relaxation	**(a)** Removal of the exit levy on repatriation of principals. **(b)** The two-tier graduated levy system on repatriation of profits simplified and replaced by a flat 10 percent exit levy, irrespective of when the profits are repatriated.
Feb-01	To provide further easing	Removal of the 10 percent exit levy on portfolio capital profits after 12 months.
May-01	To eliminate controls on portfolio investment	Complete removal of the 10 percent exit levy.

Source: Kawai and Takagi (2003)

Appendix 6: **Summary of Malaysia's Controls on Outflows of Portfolio and Other Capital (1998-2004)**

Date	Measure
01/09/1998	Approval requirement for **non-residents** to convert RM in external accounts into foreign currency , except for purchases of RM assets, conversions of profits, dividends, interest, and other permitted purposes **(no such restrictions previously)**
01/09/1998	No restrictions on conversion of ringgit funds in external accounts of non-residents with work permits, embassies, high commissions, central banks, international organizations, and missions of foreign countries in Malaysia
01/09/1998	A 12-month waiting period for non-residents to convert RM proceeds from the sale of Malaysian securities held in external accounts (excluding FDI, repatriation of interest, dividends, fees, commissions, and rental income form portfolio investment). **No such restriction previously.**
01/09/1998	A prior approval requirement beyond a certain limit for all residents to invest abroad in any form **(previously applied only to cooperate residents with domestic borrowing)**
15/02/1999	The 12-month waiting period replaced with a graduated system of exit levy on the repatriation of the principal of capital investments (in shares, bonds, and other financial instruments, except for property investments) made prior to 15 February 1999. The levy decreased over the duration of the investment, and thus penalized earlier repatriations; the levy was 30 percent if repatriated less than 7 months after entry, 20 percent if repatriated in 7-9 months; and 10 percent if 9-12 months. No levy on principal if repatriated after 12 months.
05/04/1999	Investors in MESDAQ were exempted from the exit levy introduced on 15 February 1999.
14/03/2000	Fund arising from sale of securities purchased by non-residents on the CLOB can be repatriated without payment of exit levy.
29/06/2000	Administrative procedures issued to facilitate classification of proceeds from the sale of CLOB securities as being free from levy.
02/01/2001	The exit levy on profits repatriated after one year from the month the profits are realized was abolished. Portfolio profits repatriated within one year remained subject to the 10 per cent levy.
05/01/2001	The 10 percent exit levy imposed on profits arising from portfolio investments repatriated within one year of realizations was abolished.
03/12/2002	The limit of RM 10,000 equivalent in foreign currency for investment abroad by residents under the Employee Share Option/Purchase Scheme has bee removed. Effective this date, general permission is granted for overseas investment for this purpose.
01/04/2003	The maximum amount of payment of profits, dividends, rental income, and interest to a non-resident on all bona fide investments that may be remitted without prior approval, but upon completion of statistical forms, was increased from RM 10,000 to RM 50,000, or its equivalent in foreign currency, per transaction.
01/04/2004	Resident individuals with funds abroad (not converted from ringgit) were allowed to maintain non export foreign currency accounts offshore without any limit on overnight balances.
01/04/2004	Licensed insurers and takaful operators (Islamic insurance) were allowed to invest abroad up to 5% of their margins of solvency and total assets. These entities were also allowed to invest up to 10% of net asset value in their own investment-linked funds.

01/04/2004	Unit trust management companies were allowed to invest abroad the full amount of net asset value attributed to non-residents, and up to 10% of net asset value attributed to residents without prior COFE approval. In addition, find/asset managers were allowed to invest abroad up to the full amount of investments of non-resident clients and up to 10% of investments of their resident clients.

Source: Johnson et al. (2006)

Appendix 7: A Chronology of Financial Institution Closure, The Cases of Thailand and Korea, March 1997 – July 1999

1997		
March 3	Thailand	First official announcement of problems in two unnamed finance companies, and a recapitalization program.
March-June	Thailand	66 finance companies receive substantial liquidity support from the Bank of Thailand (BOT).
June 29	Thailand	Operations of 16 finance companies suspended and a guarantee of depositors' and creditors' funds in remaining finance companies announced.
July 13	Korea	Several Korean banks are placed on negative credit outlook by rating agencies.
August 5	Thailand	Measures adopted to strengthen financial sector. Operations of 42 finance companies suspended.
August 25	Korea	Government guarantees banks' external liabilities.
October 14	Thailand	Financial sector restructuring strategy announced; Financial Sector Restructuring Agency and asset management company established; blanket guarantee strengthened; new powers to intervene in banks.
December 8	Thailand	56 suspended finance companies are permanently closed.
December 24	Korea	Foreign private bank creditors agree to maintain exposure temporarily.
December 31	Thailand	The BOT intervention in a commercial bank; shareholders' stakes eliminated.
December	Korea	14 merchant banks are suspended and two large commercial banks taken over by the government.
1998		
January 23	Thailand	BOT intervenes in two commercial banks; shareholders eliminated.
January 28	Korea	Agreement with external private creditors on rescheduling of short term debt
January	Korea	10 of 14 suspended merchant banks closed; 20 remaining merchant banks are required to submit rehabilitation plans.
March 11	Thailand	One commercial bank purchased by foreign strategic investor.
April	Korea	Four of 20 merchant banks' rehabilitation plans rejected; banks are closed.
May 18	Thailand	BOT intervenes in 7 finance companies; shareholders eliminated.
June 29	Korea	For the first time, five small commercial banks closed; two merchant banks closed and two merged with commercial banks.
August 14	Thailand	Comprehensive financial sector restructuring plan announced; intervention in two banks and five finance companies.
August 30	Thailand	Majority ownership in one medium-sized commercial bank by foreign strategic investor
1999		
July	Thailand	One small private bank intervened and put up for sale; one major bank announces establishment of an asset management company.

Source: IMF (1999b)

Appendix 8: Central Agencies for NPLs Resolution in Thailand, Malaysia and Korea

	Thailand	Malaysia	Korea
Asset Management	§ Finance companies; § Unit within FRA for "bad" assets (1997); § Radhanasin Bank for good assets but never utilized (1998); § TAMC (2001)	§ Danaharta (1998-2005)	§ KAMCO
Recapitalisation	§ BOT via FIDF	§ Danamodal (1998-2003)	§ KDIC

Source: ARIC (2000)

Notes: (a) Years in parenthesis refer to the year of creation or period of operation.

(b) FRA refers to the Financial Sector Restructuring Authority, TAMC refers to the Thai Asset Management Corporation, KAMCO refers to the Korean Asset Management Corporation, and KDIC refers to the Korean Deposit Insurance Corporation.

Appendix 9: Thailand's Basel II Implementation Timeframe

Period	Milestones
Year end 2005	The BOT to issue a series of consultative papers and conduct an industry hearing before finalizing the Basel II framework
June 2006	Banks to submit Basel II implementation plans for approval
Year end 2007	Begin parallel calculation of Basel I & Basel II: one year for simple approaches and two years for advanced approaches
Year end 2008	Begin new Basel II capital charge (SA, FIRB) and continue parallel calculation (AIRB, AMA)
Year end 2009	Begin new Basel II capital charge (AIRB, AMA)

Source: BOT (2004)

Appendix 10: **Financial Sector Master Plan (Thailand and Malaysia)**

<table>
<tr><th>Topic</th><th>Thailand (5-10 years plan)</th><th>Malaysia (10-years plan)</th></tr>
<tr><td>Effective date</td><td>January 2004</td><td>March 2001</td></tr>
<tr><td>Objectives</td><td>1. Comprehensive financial services for all potential users with no significant difference in the level and quality of services between urban and rural areas
2. Efficient, stable and competitive financial sector with a balanced composition of available sources of financing namely: financial institutions, debt instruments, and equity market
3. Fairness and protection for consumers</td><td>- To develop a more competitive and resilient financial system by building competitive domestic banks
– To promote the development of new product offerings and technical skills in the industry over the long term, relax the foreign equity limit for new entrants</td></tr>
<tr><td>Policy measures</td><td>1. Measures to broaden general access to financial services
(1.1) Promoting grass-root financial services
(1.2) Transforming the Bank for Agriculture and Agriculture Operatives (BAAC) into a rural development bank
(1.3) Encouraging existing financial institutions to increase the level of financial services to low-income household
2. Measures to increase efficiency of the financial sector
(2.1) Rationalizing the structure and roles of financial institutions to better meet customer demand
- Restructuring the Thai financial institutions: allow only two types of licenses for Thai financial institutions, full-service banks and retail banks
- Restructuring foreign-owned financial institutions: allow only two types of licenses for foreign financial institutions, subsidiaries or full branches
- “One Presence” Policy. A financial conglomerate can only have one type of license while a foreign bank must opt to be a hybrid bank, subsidiary, or full branch.
- Incentive for lending to retail customers and SMEs
· Key Conditions for Full-Service Banks and Retail Banks
<table>
<tr><th></th><th>Full-Service Banks</th><th>Retail Banks</th></tr>
<tr><td>Tier-1 Capital requirement</td><td>More than Bt 5 billion</td><td>More than Bt 250 million</td></tr>
<tr><td>Scope of business</td><td>All financial service, except:
(1) insurance underwriting
(2) brokering, trading, and underwriting of equity securities.</td><td>All financial service, except:
(1) insurance underwriting
(2) brokering, trading, and underwriting of equity securities.
(3) foreign exchange,
(4) derivatives products (unless for banks' hedging purposes)</td></tr>
<tr><td>Potential customers</td><td>All</td><td>Retail customers and SMEs</td></tr>
<tr><td>Lending limit</td><td>25% of tier-1 capital</td><td>(1) 0.05% of tier-1 capital for clean loans to retail customers
(2) 1% of tier-1 capital for loans with collateral to retail customers
(3) 10% of tier-1 capital for loans to SMEs</td></tr>
</table>
</td><td>The Financial Sector Master Plan (2001-2010) covers six segments of the financial sector – banking, insurance, Islamic banking and takaful, development financial institutions, alternative modes of financing and offshore financial services whereby the transformation will be carried out in three phases:

Phase one (2001-2003)
- Strengthen domestic banking institutions along with steps to create the necessary infrastructure for a more market-based consumer protection framework. By the fourth year, domestic banking institutions are expected to be strong enough for competition.

Phase two (2004-2006)
- Promote consolidation and strengthen incentives for improved performance. Some restrictions set upon incumbent foreign banks will be removed, such as allowing them to share automated teller machines (ATM) networks with local banks.

Phase three (2007-2010)
- Stimulate innovation through progressive liberalization. In 2007, Malaysia will open up its banking industry to new foreign players in line with the World Trade Organization (WTO) liberalization program. On the insurance industry, the government will allow new players and lift the cap on foreign equity by 2010.

Malaysia's commitment under the WTO agreement currently limits foreign equity in</td></tr>
</table>

Topic	Thailand (5-10 years plan)	Malaysia (10-years plan)
	(2.2) Streamlining rules and regulations - Improving basic infrastructure of the financial sector - Resolving tax impediments to mergers - Removing regulations that impede financial sector efficiency - Strengthening financial institutions - Enhancing market mechanism 3. Measures to protect consumers - Establish and maintain a clear procedure for handling customer complaints - Promote information disclosure - Consider introducing a Deposit Insurance to replace the existing blanket guarantee at a proper time	insurers to 30% for new foreign shareholders and 51% for original foreign owners of insurers.
Impact	1. Impact on the general public - The general public will receive better services from financial institutions. - Consumers will have better mechanism to protect their rights and ensure fair treatment from financial institution. 2. Impact on financial institutions - Reformed structure and roles of financial institutions will ease limitations on the scope of business. - Streamlined rules and regulations to promote financial sector efficiency will strengthen individual financial institutions.	- Robust aggregate risk-weighted capital adequacy ratio - Lower NPLs - More efficient and competitive financial sector with the capabilities of competing on the global stage

Source: BOT, Bank Negara Malaysia and IMF